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DECEMBER 1957
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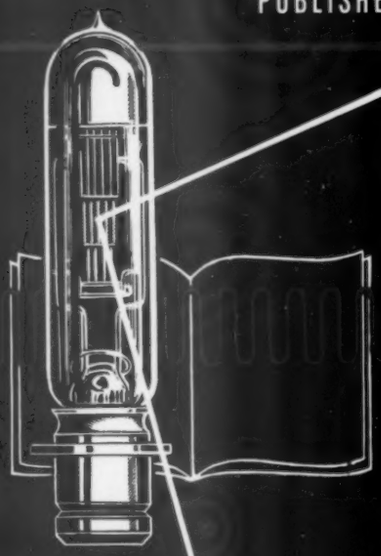

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The EDITOR'S notebook

Coming in January

Perry Graybill, Air University, tells why rapid learning is still imperative in the military and indicates trends in AV among this segment of ardent audio-visualists. Charles J. McIntyre, Armed Forces Office of Information and Education, describes a front-line experiment with "telecourses." On the civilian side F. G. Macomber and James F. Adams of Miami University point out the increasing significance of AV materials in large group instruction. Gertrude Whipple of the Detroit public schools gives a fresh slant on AV applied to reading, and Cecil E. Wilkinson describes AV progress in Canada. An article from Sten Allebeck on school radio in Sweden recalls problems faced by ETV experimenters in this country. Helen L. Allion of Washington, D. C. writes on AV and home study courses.

About the Authors

After 15 years of teaching art, **Wilfred Veenendaal** joined the staff at Michigan State University because he felt there was a challenge in combining art and visual presentation. He is head of the graphics center in MSU's audio-visual center.

A teacher in the Forest Hills High School, Queens, **Jack Entin** combines audio-visual education and social studies. He is editor of the A.T.S.S. Bulletin, a social studies periodical, and member of the audio-visual committee of the National Council for the Social Studies.

Frederick Lehman, coordinator in the Wantagh (Long Island) public schools, has taught art and social studies. His article is based on a demonstration given at the 1956 DAVI Convention.

Supervisor of graphic arts at the Indiana University AV center, **Harvey R. Frye** is a pioneer in simple graphics and photographic techniques for teachers. He originated the "lifting process" which permits the transfer of ink from a magazine illustration to transparent acetate for projection. **John Moldstad,** assistant professor and assistant in research at the Indiana center, was a contributor to AVI in October.

William H. King, equipment editor of AUDIO-VISUAL INSTRUCTION, has been teacher, principal, city audio-visual director, and since 1950, director of the office of audio-visual education in the New Jersey state department of education.

J. Preston Lockridge holds degrees in art and education. Formerly an art teacher, he is supervisor of the teaching materials department of the visual instruction bureau at the University of Texas.

Lillian Glassberg is a senior at Queens College majoring in education. Puppetry is her hobby.

Robert F. Petluck, principal of P.S. 67, Queens, is author of several articles on art education and contributor to the curriculum bulletin on puppetry published by the New York City Board of Education.

Author Lauds Critic

Congratulations upon publishing the best (and I don't mean most approbative) review of my NEA history that I have seen.

—EDGAR B. WESLEY

Ann Arbor, Michigan

[See Donald Lloyd's review Oct. AVI]

The Cover

AVI says "Merry Christmas" to its readers this year with the help of SVE (Society for Visual Education, 1345 Diversey Park, Chicago). Our cover photo, taken especially for SVE in England, is from *Christmas With Our World Neighbors,* a full-color filmstrip which also takes the viewer to Norway, Mexico and Germany. The four strips, equally authentic and matched with recordings of native carols, show the origins of many of our own Christmas traditions.

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Educator's Airlift

TWENTY-FOUR EDUCATORS from the eastern half of the United States, including myself, were guests of the Air Force in a tour organized by the National Aviation Education Council. The itinerary included Eglin Air Force Base in Florida, Maxwell Field in Alabama, and Chanute Air Force Base in Illinois. While at Maxwell Field I saw Wesley Meierhenry of the University of Nebraska who was attending the aerial firepower demonstrations at the invitation of another group.

At Maxwell we were briefed about Air Force technical training, off-duty academic educational opportunities, counseling and guidance services, the U. S. Air Force Academy, and the Air University. We toured the excellently equipped library which includes the audio-visual center directed by DAVI member John Mitchell.

The firepower demonstration was a breathtaking exhibition of the latest planes, and missile and bombing techniques. It was preceded by a static exhibit and a tour of the climatic hangar where temperatures can be varied from —60 to +160 degrees F. to test planes and equipment.

At Chanute the briefing covered training methods, training of instructors, and an excellent demonstration of transparencies and projectable demonstrators by Earl F. Werner of the Chanute staff.

The tour impressed upon us, as educators, the problem the Air Force faces in developing technicians to man their squadrons. For example, the B-29 had nine electronic systems and 150 electronic tubes, whereas the B-47 has 14 electronic systems and 650 electronic tubes. It is little wonder that the Air Force puts so much stress on the importance of students finishing high school at least before enlisting and on further education after joining the Air Force.

For more on air-age education, DAVI members can write to the National Aviation Education Council, 1025 Connecticut Ave., N.W., Washington 6, D. C. The Council's professional packets and publications contain much that is of value to educators and audio-visual specialists. Evan Evans, executive director, will be glad to send information. Membership, Curriculum or Library Services are available for $5. —A.L.H.

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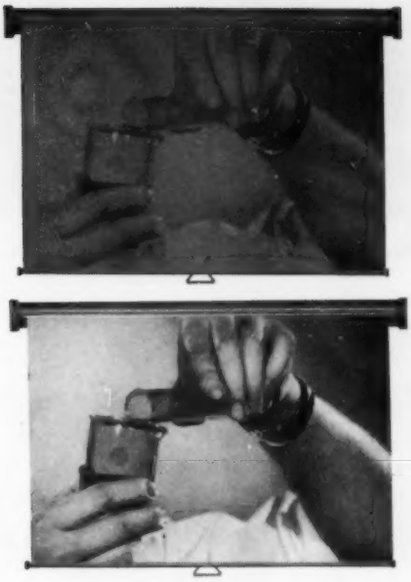

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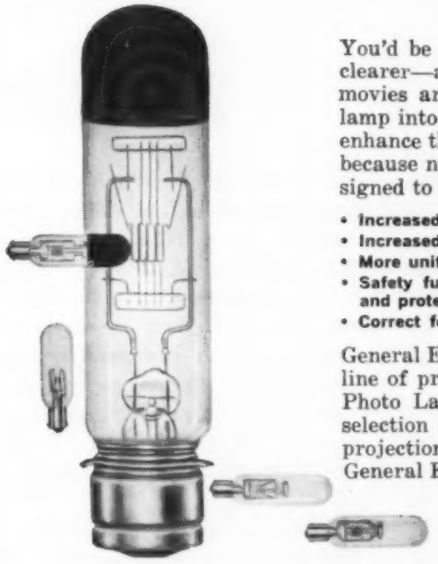

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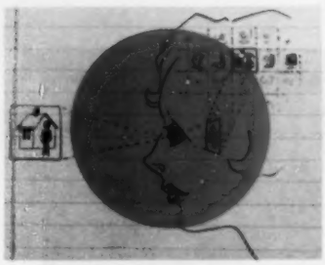
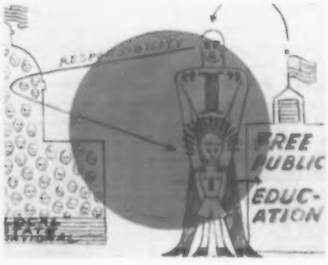
Art Decorations: Page 280, courtesy Foundation for Character Education. From *Television for Children*, illustrator, Walter Lorraine.

Our Indexer: Sarah N. Alexander, who took over the arduous task of indexing Volume II is audio-visual supervisor at Greenwich, Conn. One of the younger leaders in the field, she has been a delegate to Okoboji, has been prominent at DAVI conventions, and last summer participated in the ETV workshop at Hagerstown.





the

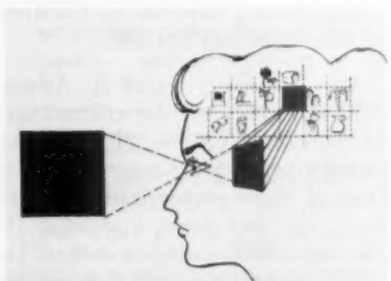
Wilfred L. Veenendaal

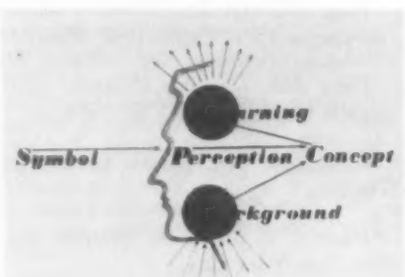
THE CONSENSUS of what everyone has a right to expect is what our schools should accomplish—this sentiment voiced in the report on the White House Conference on Education in 1955 is an apt concept for demonstrating the "how" and "why" of visualization.

For the sake of argument let us assume that any presentation can benefit from the addition of graphic interpretation as well as that of the written or spoken word. Though all of the senses are involved in learning, we receive the largest percentage of our impressions through the eye. In fact, people tend to be "picture-minded." Not only do we perceive best through the eye, but we retain those perceptions longer, and we are even inclined to create a mental picture where one doesn't already exist to assist us in categorizing it for future recall.

"Remembering by association" to our picture mind means graphic symbols which are readily and almost universally recognized. A picture is not only "worth a thousand words"; right or wrong, it makes an indelible impression upon our minds.

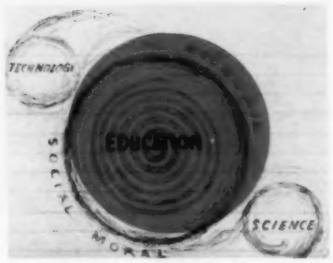
Since we say in audio-visual circles that the eye is the most effective avenue of learning rather than perceiving, it follows that percept leads to concept and concept to actual learning. It also follows, by the same reasoning, that since visual symbols are so efficacious the concepts produced will vary in accuracy in direct relation to the accuracy of the symbol. Bearing in mind the profound influence that ability and background also play upon one's interpretation of any visual device, it behooves us to carefully consider "how" before we visualize any part of the presentation.





Wrong concepts may produce negative and deleterious results. An error in concept is a breakdown in communication. Drawings must be simple, correct, and free from any possible ambiguity. They must grow out of the visualist's intuition and knowledge of his audience. They should be evaluated in terms of the results they produce.

For the purpose of this demonstration I will arbitrarily become an educator giving gist of the White House report to a group of interested citizens. I feel that I have an important and historic document to present, and I am very careful in preparing the entire presentation. First I analyze the material which I have selected, trying to find a thread of thought running through the two pages of manuscript by which I can establish relationships. I am



visualization of an idea

LOCAL preparation, as Floyde Brooker pointed out in the June 1957 AVI, *is tied up with a prevailing philosophy of education that the child should become thoroughly familiar with his community. Therefore the teacher needs locally prepared materials to fit specific situations. Beginning appropriately with the "visualization of an idea," the articles in this issue indicate the simplicity and diversity of preparation techniques throughout the country and the enthusiasm with which they are used.*

Mr. King's article on page 263 describes only one example of the companies that are taking note of the local production trend. Mr. Frye and Mr. Moldstad report that some administrators consider production sufficiently important to plan facilities in new buildings. Thus local production becomes part of the curriculum. There are considerations, however, as there are in any new development. Ann Hyer takes a down-to-earth look at these in her editorial on page 284.

becoming enthusiastic about the possibilities in what I have to say.

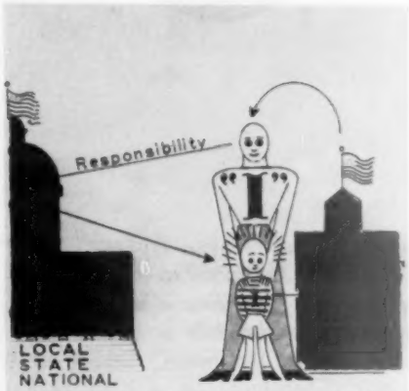
I have used visuals a great deal in teaching and speaking, and I have become visual minded. I am conscious of the fact that words can be as graphic as pictures. I am aware too of the heterogeneous nature of the recommendations and the need for unification and simplification if I am to make myself understood. I realize that my analysis and whatever I choose to abstract from the body of material is highly individual and somewhat arbitrary. In essence it will be the report; in fact it is my interpretation of the report as I have read it.

After studying the report I decide to use "Mr. Everyman" as the thread upon which I will build the structure of the visual presentation, since I feel that the emphasis is upon the responsibility of the people, individually and collectively, for the impetus, support, and direction of "free public education." I draw simple, symbolic shapes with a bold hand, putting greater emphasis upon order and legibility than upon any sort of realism. "I" as "a person, irrespective of physical or mental ability, social status, or race, creed, or

ILLUSTRATIONS BY THE AUTHOR

religion, am entitled to a free public education" in order that I may realize my fullest potential. "I" as a citizen am committed by tradition and law to provide that education through government at all levels.

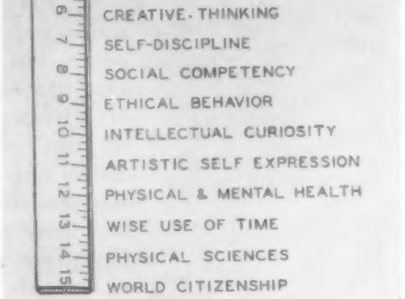
Thus I am obligated on both counts to perpetuate this educative process for the well being of our democratic heritage and through it, the nation. So I symbolize a cycle: big "I," the older generation, is responsible to little "I," the younger generation and his potential (lines radiating from his head) to provide him, through the government which is many big "I's," with a free public education so that he in turn may ultimately replace big "I."



Now that I have decided what I think I ought to say and how I am going to say it, I must decide what vehicle I am going to use in saying it. Because of the comprehensive and interrelated nature of this visual's message, the uncertain size of the audience and nature of room facilities, I decide to use an 8″ x 10″ overlay on the overhead projector. To provide for the possibility of an outsize audience I'll make a 2″ x 2″ slide of each step in the overlay presentation. In that way I'm prepared for any eventuality. It's a simple matter to break the visual down into its parts, thought by thought according to the outline, and make a separate drawing of each step in proper relationship to the rest so that the resultant transparencies will fit together like a jig-saw puzzle. Finally, I turn the rough drawings over to one of my art staff, an art teacher, or a talented art student at a planning session in which I attempt to bring about a meeting of minds. His considered comments and suggestions are reflected in the actual renderings.

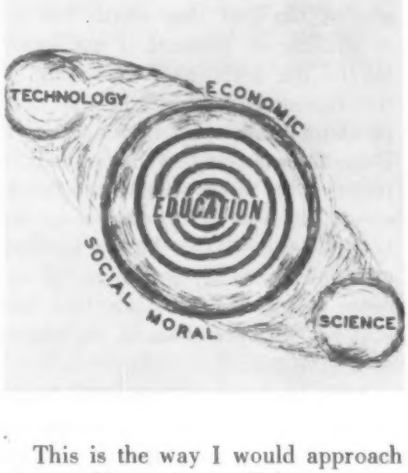
I go back to the manuscript. Since I have visualized "what" our schools should accomplish I sort out and list the "how," the content of the all-school program. As in the first instance I list as concisely as possible the points which I think are being made. It seems to me after I have jotted down the things the schools should "continue to develop," that these could very easily become jumbled and confused if illustrated, and the illustrations would not contribute to the formation of proper concepts.

Therefore, I seek some other way to visualize. I decide that these skills, knowledges, attitudes, and behavior are the characteristics of a well-rounded individual. They are in a sense the measure of a man, and since there are fifteen to be remembered I am going to use the "strip-tease" technique, uncovering plain lettered strips one by one as I present them. A ruler will become a unifying symbol, and the numbers on it the association by which each strip will be remembered.

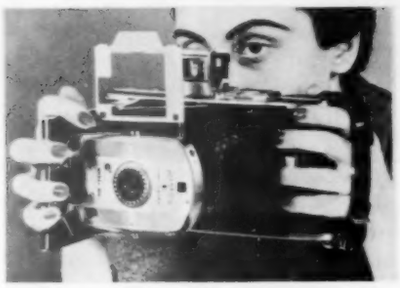
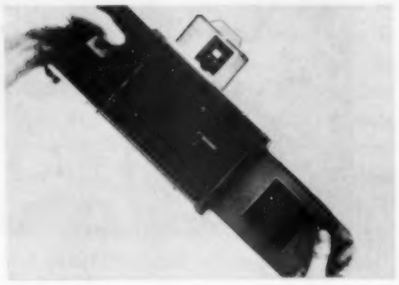
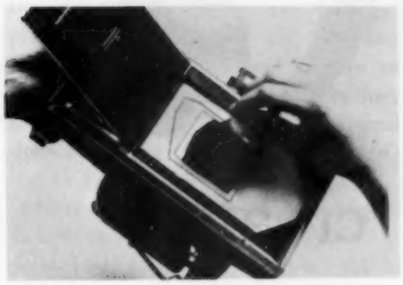
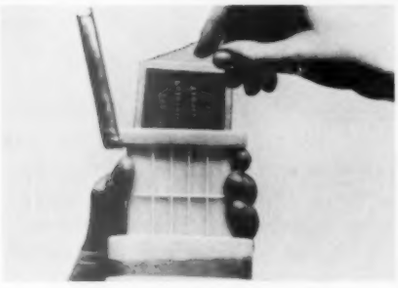
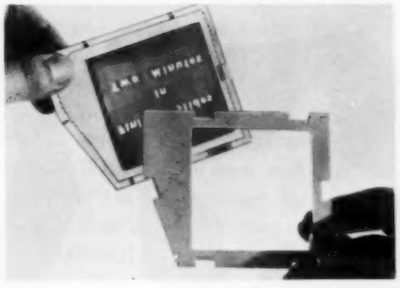
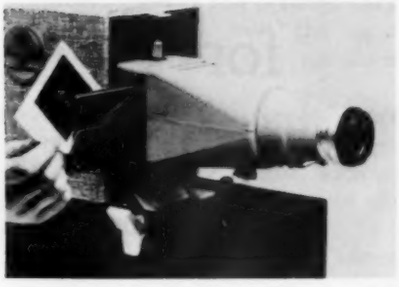


If the groups for which my presentation is intended are to be 100 or less I would construct this visual as a flannel chart to gain the effectiveness which a change of pace can impart. Then I could put title, illustration, and each statement on a separate colored strip and place them on a well lighted flannel board one at a time. The impact of a direct over a projected image plus the variety of color would help much to overcome the usualness of the word symbols.

As a concluding statement I must try to visualize the "New Challenges in Education" in such a way as to avoid giving them the flavor of a grandoise goal or an educational cliché. By now I am tremendously enthusiastic and I feel that I can transmit that enthusiasm to my audience. I decide to use the nebulae as a symbol of the formative and far-reaching nature of the "constant expansion of knowledge," and the spiral as a symbol of "educational growth" with the "economic, social, and moral implications" around its periphery. The circle as a symbol for continuous movement coincidentally gives an earthlike shape to the mass, and thus adds another concept to the whole. As a closing note in the address it could be expanded to any length desired and leave the audience in a contemplative and far-reaching mood.



This is the way I would approach the problem of visualizing a presentation. The selection of symbols is personal and somewhat arbitrary. The process of selection grows out of my background and degree of visual-mindedness. Another person might do it differently but would, I believe, go through essentially the same steps. In any case, I know of no formula for visualizing other than reasoning in terms of purpose and employing one's own knowledge.

60-Second Prints and Two-Minute Slides

a report on the Polaroid Process by William H. King

SEVERAL WEEKS before the DAVI convention last spring I persuaded Mr. Taschioglou of the Polaroid Corporation to send me a camera, a copymaker, and a projector for my demonstration center in the New Jersey state department of education.

Thus I had an opportunity to experiment for several weeks before setting up the equipment in the New Jersey suite in Washington. The purpose of having the Polaroid equipment there was to find out how state and city audio-visual directors would react to the new type 46 film.

Like many other AV specialists I had long been intrigued by the Polaroid Land Camera process which develops a finished print in 60 seconds, but I had not seen many possibilities for school use. With the introduction of the new 46 film, however, the picture changes. This is the film which is developed within the camera but gives a black and white transparency rather than a print. Mounting is quick and easy with plastic snap-on mounts. If desired, negatives and regular prints can be made from these transparencies.

Every one of the 70 or more persons who tried the equipment in Washington was enthusiastic about it. I did not hear one negative criticism, and those who have worked with them, know that such unanimity is rare among DAVI members.

The film is fast. It has an A.S.A. of 1000, making it the fastest film available today. This speed has two advantages for the educator. First of all, pictures can be taken in many classrooms using the lighting available without flash or floods. Secondly, it allows the "bounce flash" technique to be used; that is, the flash gun is tilted so that the light reflects from the ceiling rather than being directed toward the subject. This gives a more natural lighting and eliminates the harsh shadows of standard flash.

The copymaker is the real gem. The camera is attached to what looks like a standard copy stand, but all of the calculations and guess work have been eliminated. Directions are given to calculate the camera height, the supplemental lens, etc., so that the operator finishes with a properly exposed, properly framed, correctly focused transparency ready for mounting. Think what it would mean to your teachers if you, as the audio-visual director, were in a position to provide them with a set of slides for class use within an hour from the time you received their request.

To me, the important thing is that any classroom teacher or audio-visual director can produce satisfactory slides. One does not have to be a photographic expert. Experience at our demonstration center has shown that people who have never seen or used the equipment before can make satisfactory slides with 10 to 15 minutes of instruction.

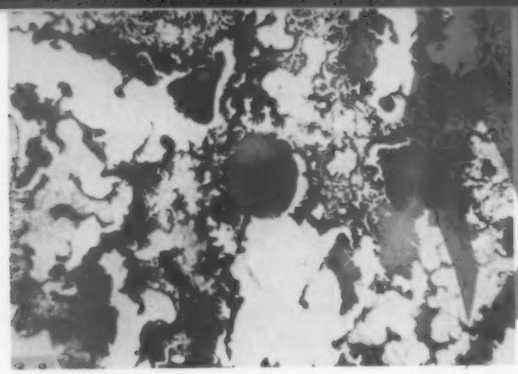
Another very important point is the fact that the equipment is not expensive. The camera, the copymaker, and the projector can be purchased for under $300, a price certainly within reach of most schools or school systems. However, like any audio-visual aid, this sum will be money wasted unless someone in the school system takes the initiative to use the Polaroid equipment for instructional purposes.

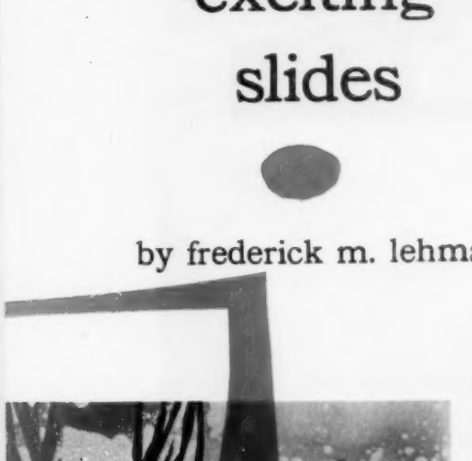
Whatever resistance to Polaroid equipment is found among teachers and administrators is directed toward the projector. Designed to project only 2¼ x 2¼ slides made by the 46 film, the 500-watt projector gives a bril-

(Continued on page 281)

creative techniques for exciting slides

by frederick m. lehman





IN THESE DAYS of increasing interest in films, tape recordings and other electronic techniques, we must be especially alert not to overlook the creative media in which the paramount value is the *activity of the child*.

Contrary to some opinion, the 3¼ x 4 projector is decidedly not obsolete unless one thinks of it exclusively as a device to project commercial glass slides. Recently it has come to the fore, together with the newer large overhead projectors, as a means of letting children present original ideas in the classroom.

Here are some techniques and devices, not particularly new, especially to art educators, but perhaps more

The illustrations on this page are reproductions of original glass slides from the author's collection. They were made especially for AVI *by the Polaroid Corporation.* *See page 263 for a detailed description of the Polaroid process.*

exciting to the classroom teacher than the well-known traced drawings on slides.

Water-solvent colored pencils, special lantern-slide crayons and inks, India ink and black graphite pencils —all familiar to devotees of hand-made slides—are much more effective if combined with an endless variety of materials which may be cut out with scissors. These materials—and the fun comes with experimenting and finding new ones—are of two basic kinds: opaque and transparent.

Opaque materials for standard projection must, of course, be of such a nature that they permit light to pass around the opaque parts. Fine netting, mesh and other thin loose-textured fabrics, thread, very fine wire and sprinklings of small chips can be used both for background effects and for representation. Cutout silhouettes made of thin opaque paper present marvelous creative challenges and are actually easier for many children than drawings.

Most of these opaque materials are more exciting combined with transparent color. Although special lantern-slide and other inks are fine for brightening up small spots, there are better materials for producing large color areas. Perhaps the easiest to procure and to work with is colored cellophane, available in many forms from candy wrappers to dime store rolls. It is important to realize that this technique is not limited to cutting precise details. Simple geometric shapes or free forms may be cut out and placed over silhouettes. They also may be added to line drawings without attempting to keep the color within the space of the drawing. Older children capable of more exact cutting can give strength and vitality to maps, graphs, and diagrams by using areas of flat transparent color with or without the addition of pencil or ink lines.

An improvement on cellophane is theatrical gelatin. This medium, though slightly more brittle and therefore harder to handle, is readily available in a greater variety of colors. It comes in the form of small sample booklets, containing about 95 different colors, 1 x 4, at about 25 cents per booklet. (Available from Century Lighting, 521 West 43rd St., and Capitol Stage Lighting, 527 West 45th St., New York.)

Theatrical gelatin, in addition to its advantages as a dry medium, is also soluble in water. It can be roughly cut, arranged on the glass slide, and soaked with a small brush. When the slide has been quickly covered with the second sheet of glass and tacked on two edges with tape, it can be placed immediately in the hot projector and allowed to "cook." The melting, running, and blending action of the colored gelatin not only is visible to the children as they watch the screen but can be stopped at any desirable point. The finished slide removed from the projector and bound properly will provide a fascinating color sensation whenever projected. With a little luck and care the blending color areas can be so controlled that they form parts of a representational picture, a fantastic stage set, or other decorative slide presentation. Many children will find this creative process itself a satisfying art experience. Another form of transparent color is found in the adhesive color sheets usually sold for the larger, overhead transparency projectors. (From Charles Beseler Company, 219 South 18th St., East Orange, New Jersey, and other distributors.)

How To Achieve Motion

Movement as well as color can be applied to hand-made slides by putting together, with or without holding pins, various colored transparent plastics. By superimposing one cut-out piece of plastic on another, or on a diagram, relationships may be demonstrated vividly. These can be explained further by moving the pieces about while the class watches the screen. Here an overhead type of projector in which the slide lies horizontally is almost a necessity, but the size can be 3¼ x 4, as in the Keystone overhead. The Navy, which uses this technique with the larger projectors, has made up demonstration kits for each presentation.

Lettering on slides can be accomplished with the usual freehand pencil and ink work on etched glass or Slidecraft and typing on Radio-Mat or cellophane enclosed in a sandwich of carbon paper. It is also possible to type, write or draw on tracing paper which is afterwards made translucent by any of a number of liquids. Among them are lacquer, plain mineral or other oil, and any chemical "wetting" agent known to the high-school chemistry teacher. Care must be taken that the liquid does not cause ink lettering or drawing to run.

Here are three important thoughts to keep in mind:

1. You, as teacher, do not have to be an artist. Let the children draw. Let them draw, or create without drawing, no matter how crudely. They will be delighted with the most sketchy results when they see them on the screen.

2. Keep the slides simple. Don't overelaborate the design even though you combine several media, such as cellophane, pencil and cut-paper silhouette on the same slide.

3. Experiment! Only the barest suggestions have been presented here with the thought that you and your class, or your teachers if you are a principal or an audio-visual director, will find other original techniques.

There is endless opportunity for using hand-made slides throughout the curriculum. First, the slide itself need not be 3¼ x 4, the old standard size. Many of the ideas presented here can be used with 2 x 2 slides for the small projectors owned by almost every school. Basic materials for this size are available at most large photographic supply stores.

Again, there is no limitation in subject. From primary reading to high school physics, from art to mathematics, the usefulness of the medium is limited only by the vision of the teacher. Because most teachers cannot be expected to visualize the possibilities in a teaching device which may be completely strange to them, it becomes a function of the audio-visual consultant or the supervisor to introduce the technique and perhaps suggest ways to use it.

Finally, there is scarcely a limitation in grade area, whether it's the children themselves or the teachers who contrive these simple but exciting slides.

So let's dig up from forgotten closets our old Balopticons, Delineascopes, Keystones or other stereopticons. Or let's buy new slide projectors and put them to work. The product doesn't have to be a masterpiece. The creative process is the worthwhile experience.

flexible and inexpensive

by J. Preston Lockridge

ILLUSTRATIONS BY GERDA MC MURRY

THE FLANNEL BOARD is an effective means of presenting visual and verbal material to stimulate thinking in practically every learning situation which may arise in the classroom. It can be used advantageously with materials relating to readiness, skills, creative activities, drills, and new knowledges, and it offers excellent opportunity for group discussion, planning, and participation. However, its effectiveness depends largely on the care and thought with which the materials are planned, produced, and used.

Visual materials for flannel boards include both commercial and teacher-prepared materials in the form of cut-out silhouettes of objects, animals, symbols, characters and pictures. Commercially prepared materials are usually ready for immediate use on the flannel board, while those prepared by teachers will require a backing of flannel, felt, sand paper, blotter, or similar material that adheres to the flannel board surface. Visual materials should be chosen with discrimination for immediate as well as future use.

Any verbal material on the flannel board is usually employed to keep the observer aware of the main idea being presented or to supply names of unfamiliar visual forms.

Both visual and verbal materials should be carefully integrated in thought and presentation. It should be remembered that flannel board materials are a dramatic way of attracting attention and arousing interest. Every movement that the speaker makes should contribute to this drama.

The learning situation, the characteristics of the group, and the nature of the subject matter will determine specific techniques for using the flannel board. In assembling and preparing materials, the teacher may find it helpful to develop a detailed lesson plan or guide.

The flannel board demonstration may be designed for any size board, depending upon the amount of material to be covered and the time allotted. The size of the board will determine the size of materials, which should in any case be large enough to be seen by all observers. The flannel board is best used with a "classroom" size audience. All verbal material should be brief, free from unnecessary words and phrases. It should be specific, relevant to the subject matter, and printed in a manner so as to be easily read by the observers. Simplicity, legibility, and manageability are key factors.

The flannel board should never appear cluttered or crowded, but should be arranged in an orderly, interesting manner. Effective use of balance, lines, emphasis and space will produce an attractive and dramatic presentation.

Balance can be either formal or informal. Materials for presentation

may be compared to a set of scales—objects are balanced by other objects which are completely different but have the same weight. Lines made of yarn will adhere to the flannel board surface and may be used in balancing and unifying the presentation.

Every presentation should have an area of emphasis—a main point of interest. This can be a large word, a bright color, or an unusual shape. Sufficient two dimensional space, or flannel board surface, will give a feeling of simplicity. Three-dimensional materials may be used if they are light in weight and adhere to the flannel surface.

An attractive color scheme is important. The materials should contrast with the background, and sometimes contrast in the materials themselves will add interest. A color or related colors may be repeated to provide unity of design. Repetition of a shape or even sizes is another effective device for unifying materials. All of these elements of design will help the materials arouse interest with their novelty, variety, and color.

After the materials have been prepared you should rehearse the presentation enough to determine that it will not run over the time allotted. Practice your timing and pacing, and visualize each complete board before starting your lesson. Make sure the materials are arranged in sequence to fit into the lesson guide so that they may be picked up easily without hesitating or fumbling. Place the flannel board at eye level and at a slightly inclined angle.

Try out the layout; be sure it fits the space. When placing the materials on the flannel board, arrange them logically and attractively. Prepare with special care for those moments of greatest difficulty—the periods of

Arrange your materials in definite sequence

transition from one stage of the presentation to the next. As you remove the materials which you have used, talk about them or review what you have said or, better still, explain how they prepare the way for the next stage. Practice speaking to the audience rather than to the flannel board.

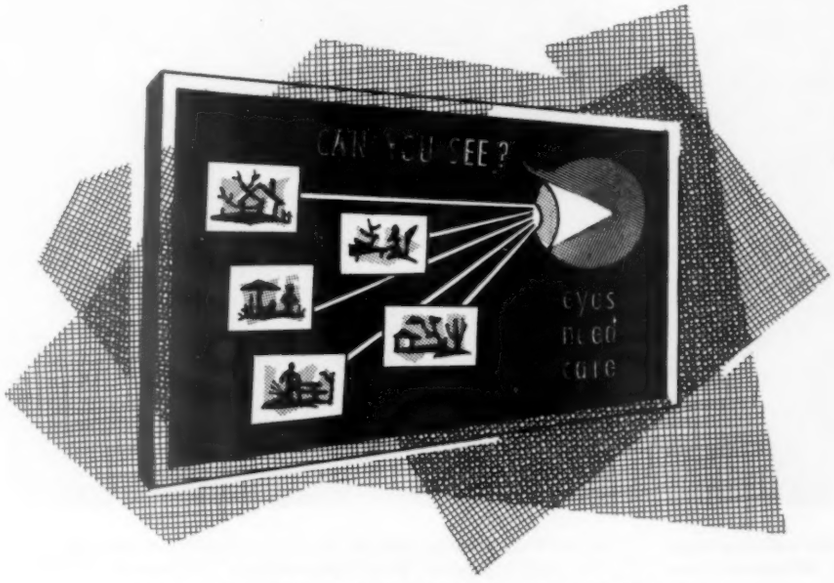
As indicated earlier, visual and verbal materials should be arranged in a definite sequence to fit the plan of presentation and placed around the board or on a near-by table so that they can be reached with a minimum of movement. An outline of the lesson plan should be placed so that it may be seen with ease by the teacher and thus used without distracting attention from the flannel board. The flannel board should be mounted in full view of all the audience and tilted back to provide better support for the materials. Care should be taken that the board is not placed in the direct path of a fan or drafts. All background objects that may tend to distract the observer's attention should be removed. If possible, check the lighting and ventilation.

At the beginning of the class session, it is essential that you stress the purpose and importance of the lesson, and tell the members of the group how they will benefit from it. The first few cards you place on the flannel board should assist you in arousing the interest of the group. Use your cards in a dramatic way, but make sure that each point is clearly presented. In some cases, it might be wise to take an extra minute

Take an extra minute to clarify a point

or two to clarify a point. Whenever possible, the lesson should be prepared so that the group can discuss points in the lesson and directly apply the information to their own problem. At the end of the lesson the main points can be summarized by writing them on the chalkboard or by representing the pertinent verbal materials.

The possibilities of a flannel board presentation are as unlimited as the materials available. Any teacher who wants to exercise his flare for the dramatic and who will take pains to insure perfect timing can have a presentation that is sure to make concepts clear and stimulate thinking—and this with a setup as inexpensive as any teaching aid in the audio-visual center.



Make your flannel board simple and orderly with emphasis on space

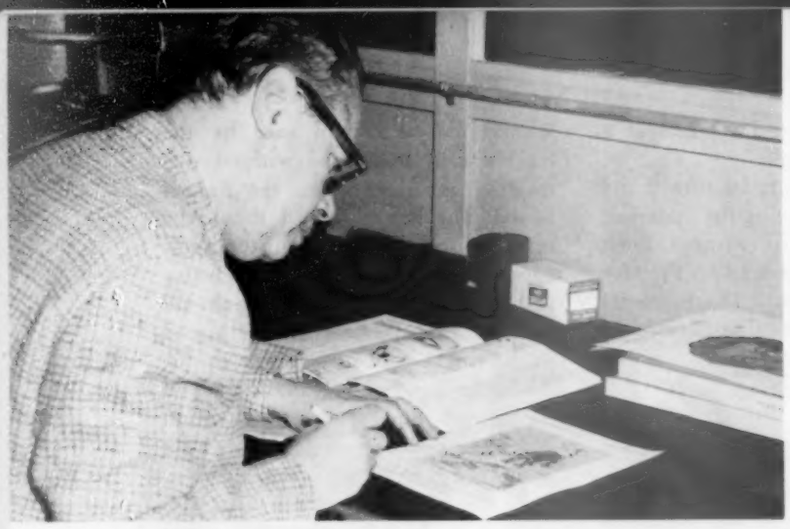
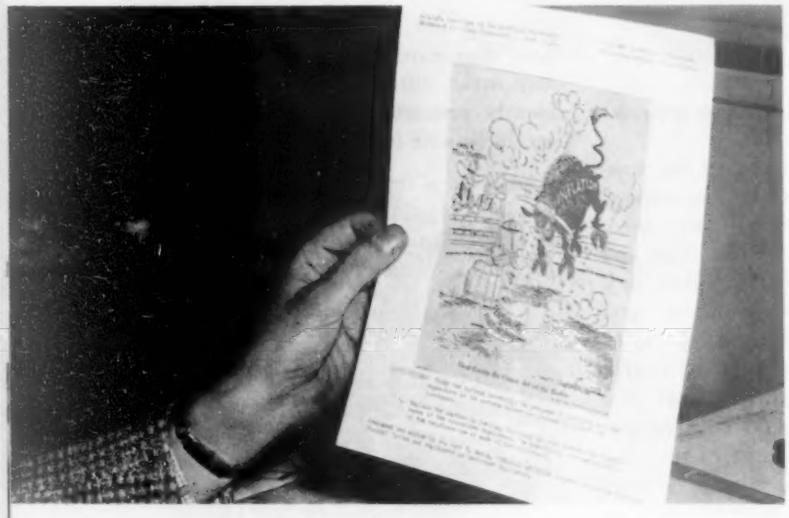


Fig. 1. Shown above is the author who is creator of the Stenafax-Gestetner duplicated visual supplement. Here he prepares a paste-up.

Fig. 2. The paste-up. While this sheet is in preparation, another is placed on stencil cutter; thus two visualizations are prepared at once.



FOR MANY YEARS teachers, supervisors, and administrators have utilized duplicating machines varying from the simple gelatine pad to the electric ink-drum roller type of today. Scarcely a teacher in a large city school is unfamiliar with the current duplicating processes. Each one utilizes whatever device is handiest and often hopes for some new and better way to get the materials "turned out" for classroom use.

The duplicator has been for years a primary tool for preparing mass quantities of handwritten and typewritten text as supplementary information to textbooks, as advance lesson assignments, and for test purposes. Employing a Stenafax stencil cutter and Gestetner duplicator, the techniques described on these pages show the duplicator in a new light—as a tool with potentialities for creating visual as well as printed materials.

When preparing free-hand drawn stencils, the teacher or student traces the copy on the wax stencil from the original or traced drawing through a mimeoscope or other device. As

Jack W. Entin | **the**

Fig. 3. Stenafax stencil cutter is electric device which transmits original copy from paste-up to plastic stencil in 6 to 15 minutes time.

Fig. 4. Stencil which appears white in photo is actually dark gray with black impression. Above, reproduction is inspected for quality

shown in Fig. 1, a paste-up is prepared by taking an illustration such as printed text, cartoon, or photograph and placing it on a sheet of white mimeo paper (8½" x 11" or 8½" x 14") in a place that will offer the most prominent view. Text can be added by means of typewriting directly on the sheet or by adding handwritten text. The paste-up shown in Fig. 2 was one of two visualized sheets prepared almost simultaneously. While one paste-up was in preparation, another was placed on the stencil cutter (Fig. 3).

This electronic device transmits original copy from the paste-up to a special, plastic stencil by electric eye in the space of from six to 15 minutes. On the roller to the left is the original copy. On the right roller, one can see the fine lines cutting into the dark gray stencil. The density of the original determines the intensity of the reproduction (Fig. 4). Although the stencil appears to be white in the photograph, it is actually a dark gray color with black impressions. In Fig. 4 the stencil is inspected for quality of reproduction

duplicated

duplicated

duplicated visual supplement

duplicated

duplicated

The Gestetner stencil was used in the process illustrated because it provides ample writing surface. Its width is 8⅞" and one can use almost 8½" of its space for copy if the Gestetner duplicator is employed. While one stencil is being run off on the automatic Duplicator 260 (Fig. 5), the operator inspects registered sheets reproduced by the hand-operated Duplicator 120 (Fig. 6). In both completed sheets the subject is "Inflation," a matter of current interest in economics classes today. One illustration is a cartoon strip of five frames by Yardley of the *Baltimore Sun;* the other, a cartoon by Dowling of the *New York Herald-Tribune.*

Prepared in quantity, these materials will enrich class discussion and vitalize theoretical aspects of current economic problems. They can be used as an aid in applying current events to textbook study, for discussion worksheets, and for examination purposes.

If the teacher wishes to be economical or is uncertain how to treat each subject until a propitious moment occurs, he can save illustrations until he has acquired a sufficient number to paste up on a single sheet. No text need be added other than that provided by the illustration. A stencil can be made of the entire lot, to serve as "insets" for future use.

When preparing an ordinary wax stencil for an inset, a window is cut into the stencil with a razor blade or other sharp instrument. The inset should be cut out of the stencil with a margin of about a quarter of an inch. When stencil cement is applied to this margin overlap, it adheres to the frame of the window. This inset will hold as firmly as if the window had not been made. The stencil is then ready for typing text. When run off on a mimeo duplicator, it will register copy on which there will be no noticeable evidence of the aforementioned operation.

As the operator becomes more adept at carrying out the inset operation, he will find that the preparation of these illustrative supplements will prove worthwhile. A capable student can learn the technique quickly and thus free the teacher for other duties.

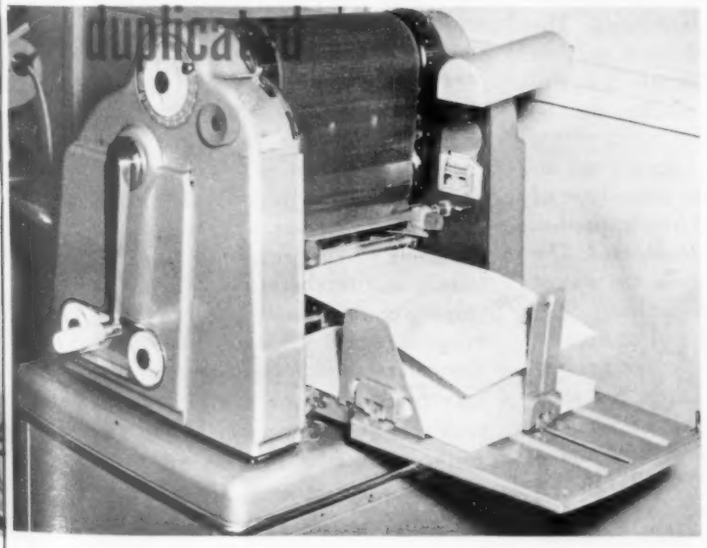


Fig. 5. The Gestetner duplicator in operation. Materials prepared in quantity serve as spur to class discussion and as supplement to text.

Fig. 6. The hand-operated Gestetner 120 turns out copy from stencil. Water-soluble ink permits inspection of copy without ink staining.

Making Room for AV

by John Moldstad and Harvey R. Frye

ILLUSTRATION BY THE AUTHORS

***THE** authors remind their readers that although a wealth of commercially prepared materials exists, there will always be teaching situations for which ready-made materials are either not available or are unsuitable. Thus facilities for local production are increasingly recognized as an important addition to the school building or system. Shown on these pages is a combination AV production and distribution center designed for the individual building.*

IF TEACHERS are to be encouraged to enrich teaching through locally produced materials they must be provided with pleasant and well-planned facilities, simple yet high-quality production equipment, and ample supplies and materials.

The equipment and supplies will differ depending upon the production competencies of the teachers and the types of teaching materials desired. In any case, the following techniques are frequently needed in some combination or other: mounting, lettering, coloring, photography, and often some form of duplicating.

Some school administrators consider local production sufficiently important to include special workrooms for teachers in their new buildings—elementary and secondary. The diagram at the right illustrates a plan proposed by the writers for a combined teacher's workroom and audio-visual distribution area.

The left (and largest) portion of the diagram is taken up by the teachers' workroom where facilities are available for the five production techniques mentioned. At the lower right is the photographic darkroom and at the upper right, the distribution area where commercial teaching materials are cataloged, stored, maintained, previewed, and distributed together with equipment necessary for their use. Both distribution and production activities will be under the guidance and supervision of the audio-visual building coordinator.

Items No. 1 through 9 indicate pieces of production equipment which the writers consider basic to a well-equipped teachers' workroom. Diazo printing equipment for making transparencies and duplicating materials, Polaroid Land Cameras and copy stands for making 2¼ x 2¼ slides and additional cameras for outdoor shooting are also possibilities. The price ranges indicated serve only as a rough estimate within which equipment of acceptable quality can be secured.

Items No. 10 and 11 simply call attention to the fact that some type of film storage racks and film inspection equipment should be considered. The exact type depends upon the extent and use of the film collection.

Since AV materials and equipment are frequently used by teachers at other than in-school hours, the writers suggest a return slot similar to that on a night deposit box and a recessed return box (No. 12). In this way, films, filmstrips, records, and tapes can be returned safely by teachers at any time, whether or not the audio-visual coordinator or student assistants are on the job. Notice that the equipment distribution recess (No. 13) resembles that at which airline baggage is checked. This arrangement enables projectors and other heavy equipment not on carts to be pushed easily under the counter and minimizes congestion through the main doorway.

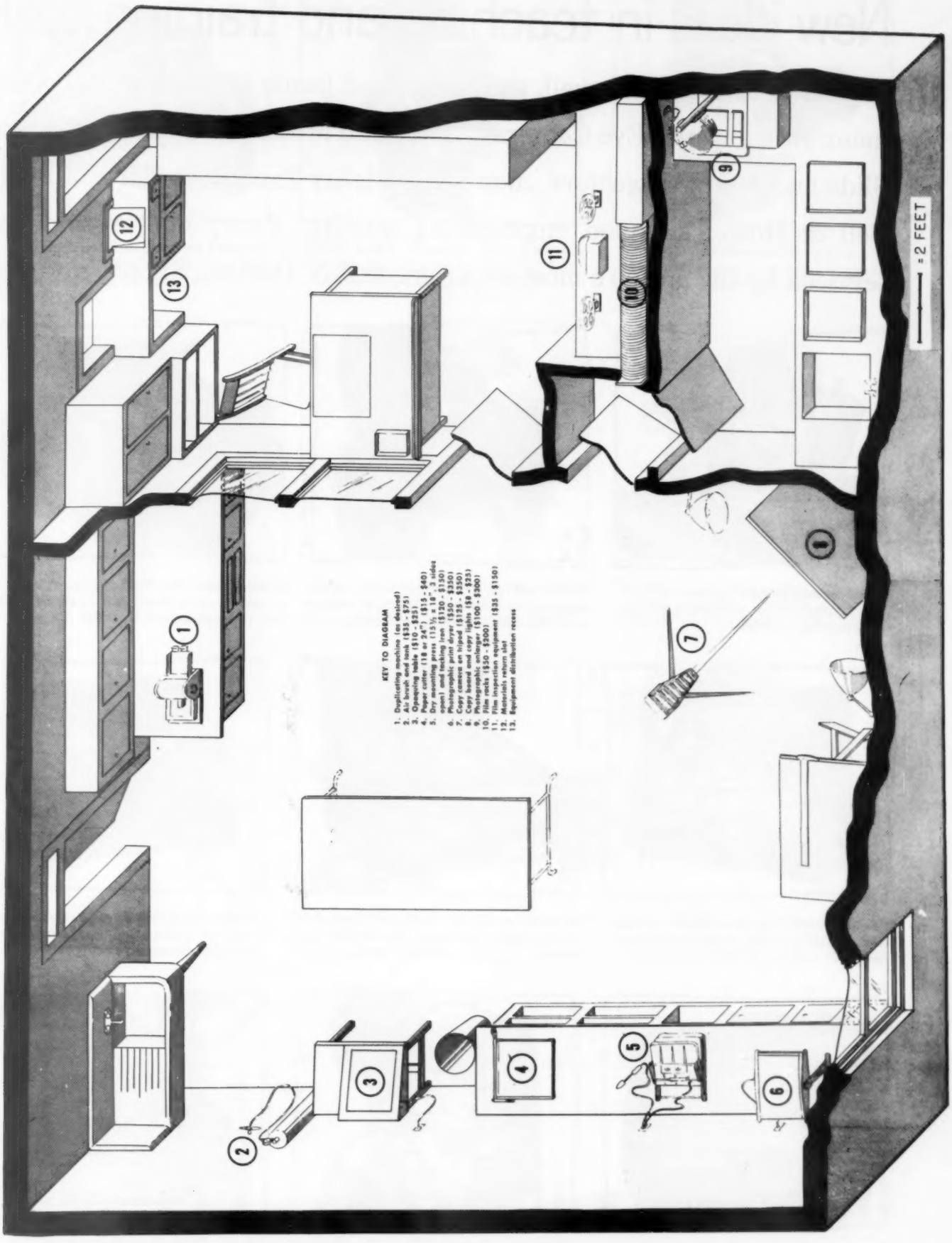
Through the windows between the two major functional areas the AV coordinator observes activities under way in one room while working in the other. Thus, he can help teachers in the workroom and at the same time maintain a certain degree of supervision over student assistants working on audio-visual distribution.

If the building already has facilities for the distribution and storage of AV materials, only plans pertaining to the teacher's work space and photographic darkroom need be considered. The diagram at the right was drawn with a typical 22 x 36-foot classroom in mind, but size and shape can be changed to fit local conditions. If changes are made, care should be taken to allow sufficient room around the work stations. The diagram was drawn to scale after carefully considering space requirements for each task.

Location of the combination workroom and distribution center will probably be a compromise of many considerations. The primary one must be accessibility to the majority of teachers in the building. Space near the principal's office but not adjacent to it is desirable because teachers can sign, pick up, and return materials and equipment when they check for notices and mail. Also, notices and schedules pertaining to the audio-visual program will always be readily accessible.

If the workroom is adjacent to the principal's office there is the probability of congestion between student assistants moving equipment and materials, and teachers and others converging on the principal's office. However, in some schools—particularly elementary buildings—the principal may function as AV coordinator. In such cases, advantages of having the audio-visual area next to his office may outweigh other factors.

Careful consideration of specific local conditions and needs should influence the ultimate location of the area.


KEY TO DIAGRAM
1. Duplicating machine (as desired)
2. Air brush and tank ($35 - $75)
3. Opaquing table ($10 - $25)
4. Paper cutter (18 or 24") ($15 - $40)
5. Dry mounting press (15½ x 18", 3 sides open) and tacking iron ($120 - $150)
6. Photographic print dryer ($50 - $350)
7. Copy camera on tripod ($125 - $350)
8. Copy board and copy lights ($8 - $25)
9. Photographic sink ($100 - $300)
10. Film racks ($50 - $200)
11. Film inspection equipment ($35 - $150)
12. Materials return slot
13. Equipment distribution recess
= 2 FEET

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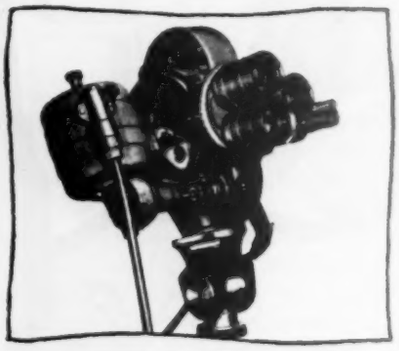
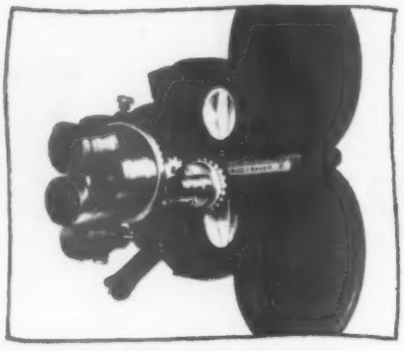
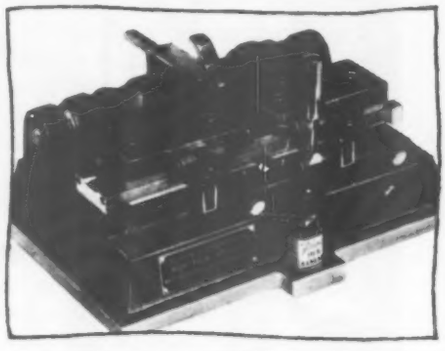


Seven Speed Triple Turret—all-purpose 16mm camera calibrated for motion analysis. **70TMR.**



Motor Driven Triple Turret—over 15 minutes continuous filming, 400′ magazine, electric motor. 16mm. **70HR.**



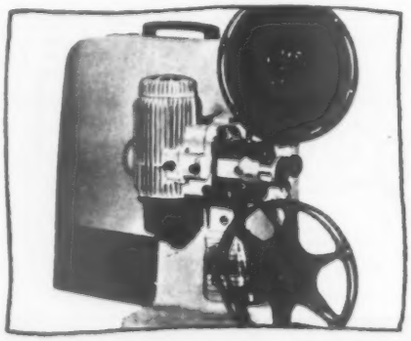
Professional Hot Splicer—portable electric model. Cuts film handling costs. Makes fast, permanent splices. **198.**

Professional Type Recorder—upright tape recorder with push-button controls, 10″ speaker. **730G1.**

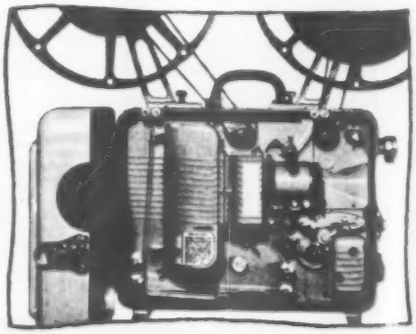
4-Speaker Tape Recorder—high fidelity for music appreciation. Unique sound system, simple operation. **300L.**

Deluxe Portable Tape Recorder—superior 2-speaker model, versatile and compact, newest control features. **775.**

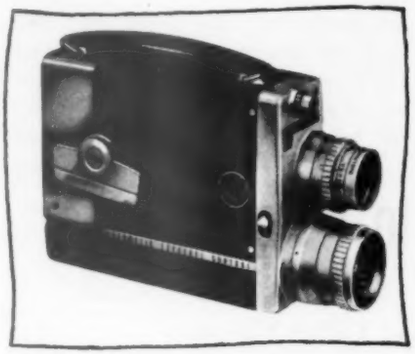
Magnetic Recording Projector—allows you to record sound on 16mm film—shows sound or silent film. **302.**



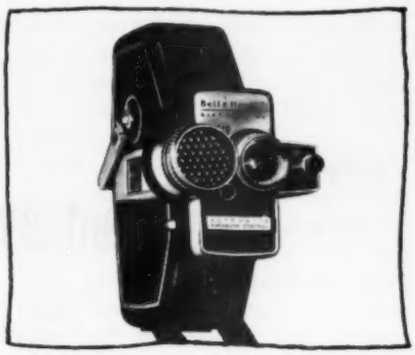
Variable Speed Silent Projector—16mm silent projector adaptable for film analysis. 400′ capacity. **273.**



Heavy Duty Sound Projector—meets all projection situations, conference rooms to auditoriums. 16mm. **614CF.**

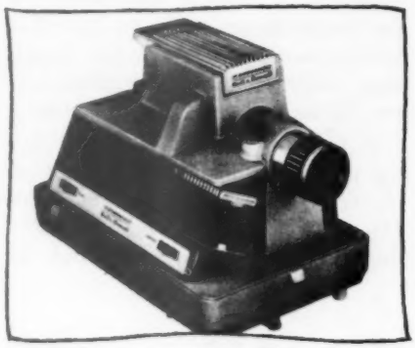


Magazine Load Electric Eye Camera – automation in filming; the lens sets itself *automatically*. 16mm. **200EE.**

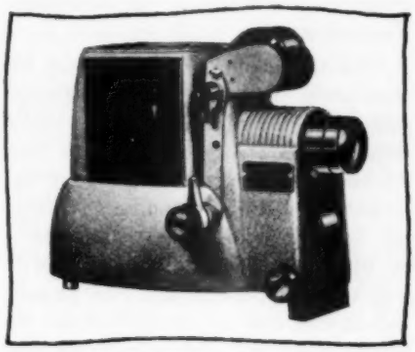


Spool Load Electric Eye Camera – automatic exposure control. Lets everyone shoot expertly. **240EE.**

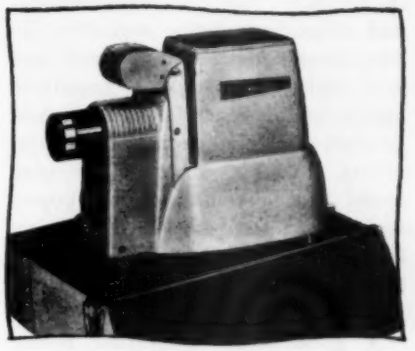
Triple Turret Movie Camera – highly versatile 16mm with multiple lenses for instant change of perspective. **240TA.**



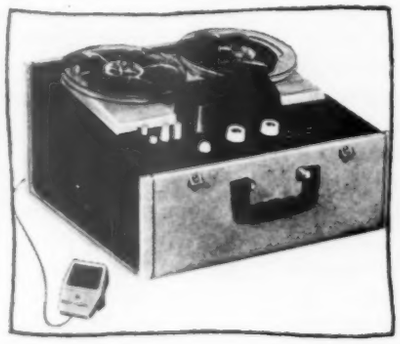
Automatic Slide Projector – Changes slides automatically or by remote control. Easiest to use. **Robomatic.**



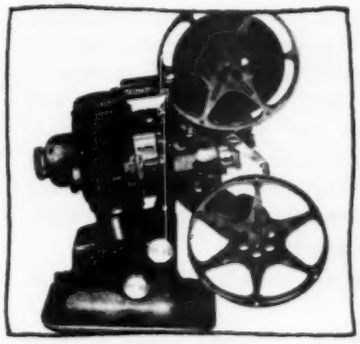
Filmstrip and Slide Projector – shows single and double frame strips and 2x2 slides. Unusually bright image. **724G1.**



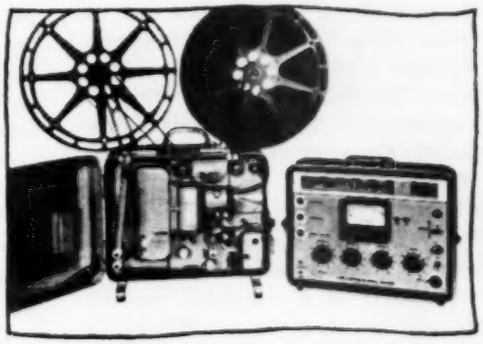
Brilliant Multipurpose Projector – same versatility as 724G, with extra brilliant 750 watt illumination. **724A.**



Portable 2-Speaker Tape Recorder – excellent fidelity, stretches your A-V budget without loss of quality. **770.**



Time and Motion Projector – lets you analyze action by slowing or stopping film. **173BD.**



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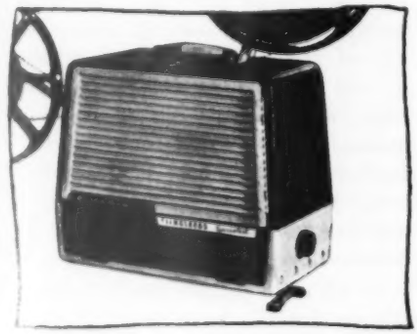

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FINER PRODUCTS THROUGH ***IMAGINATION***

from fantasy to learning

by Robert F. Petluck and Lillian Glassberg

PART of a child's everyday world includes fantasy, daydreaming, and other imaginative activities. To him, these activities are natural and acceptable. They serve as important outlets for his inner feelings. A child is often unable to express himself to others. In this make-believe play world he can vent his fears, hopes, wants, and desires without risking the hardships of reality. He can transcend the limitations of time and space.

A great many important motor skills are acquired or practiced in connection with highly imaginative activities such as playing house, building blocks, or playing a character part. Many children are able to reveal their thoughts or feelings through drawing, painting, or puppetry. The child is telling a story or expressing his feelings through these media. Our culture has acquainted children with the medium of dolls which satisfy their play instincts. From dolls to puppets there is a natural and logical bridge.

Puppetry is a wonderful medium through which to teach all subjects and lessons. Sewing and painting become meaningful. Writing and acting a play becomes a language arts unit. Costumes and scenery require research which is a basic part of a social studies lesson. Measuring the puppet, stage, and the materials used become lessons in mathematics.

We can classify puppets into those that are ready made and those readily made. Among the ready-made puppets is the child himself. He may wear a mask or a veil. He may be behind a curtain casting a shadow of himself, or casting a shadow of his hand. Others in the ready-made class are dolls, a darning egg, a store puppet, or a toy scarecrow. In a few moments the stage is set and the children are ready to put on a performance.

The readily made puppets may be fashioned from ordinary material used as a challenge to the child's imagination and resourcefulness. The children and teacher might save up materials in advance and store them in labeled boxes. Thus, they have a library of materials which will expedite puppet-making. For puppet heads, one can use such materials as socks, stockings, old newspaper, paper towels, cardboard tubes, rubber balls, or interestingly shaped potatoes. For the features they can collect buttons, beads, or jewels. Rope, steel wool, wool yarn, wood shavings, felt, or pieces of fur make interesting hair. All types of materials, cloth, felt, leather, oilcloth, and feathers can be used for clothing. Cotton or kapok is excellent for stuffing. Other potential materials are pipe cleaners, thin wire, and fingers of old gloves.

Here are some readily made puppets:

1. Potato puppet: Make a large hole in one end of the potato to fit the index finger which will control action. Thumb tacks or buttons make

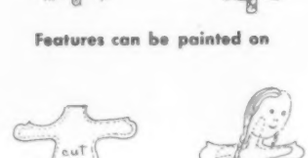
Potato Puppet

attractive eyes. The mouth and nose may be painted, glued on, or pinned in place. To make the clothing, a square piece of cloth about 14", or large enough to cover the hand, is used. Spread the square over the hand, cut a hole in the center for the index finger, and two smaller holes, one on either side for thumb and middle finger. (A rubber ball can be used in place of the potato.)

2. Quickie puppet (excellent for the younger child because of its simplicity): Cut a piece of buckram 1½ x 4". Roll it around the index finger to form a cylinder. Put an

Making the head

Features can be painted on

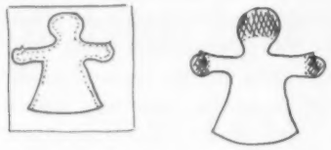


Costume is used as body

elastic band around it. Take a 7-inch square of material and put a handful of cotton batting in the middle of the cloth. Tie with string around the buckram cylinder. The head can be pushed into shape for a human face or an animal. The features can be painted on, or crayon used. Felt or cloth can be used for animal ears. The costume serves as a body.

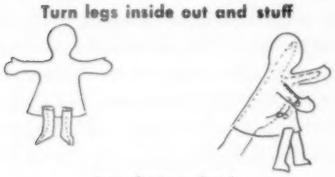
3. All cloth puppet: Make a paper pattern for the body and legs. The body must be made large enough to fit a child's hand. Sew around edge

and turn inside out. Stuff head and hands. Cut out the legs and feet from double thicknesses of muslin. Turn inside out and stuff. Sew legs to the body and make a costume for the puppet.



Sew around edge; turn inside out

Turn legs inside out and stuff



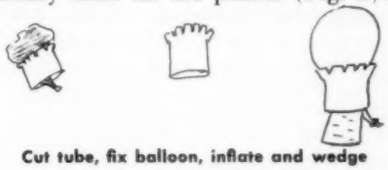
Sew legs to body

Make costume

4. Papier maché head puppet: The papier maché head may be made in several ways. Take the cardboard tube from a roll of paper towels and cut to size. Then make a wad of newspaper or toweling around the tube until it looks like an orange. Leave part of the tube exposed for the neck. Cut paper toweling into 1-inch strips and wet thoroughly with creamy library paste (well mixed with water). Cover with three layers of paste-covered paper. Push in the eye sockets. Make a small wad of paper for the nose. Anchor the nose in place with strips of paste-covered toweling. Build up the chin, ears, and lips the same way. The features can be pressed into shape while the mass is still wet. Add a final layer of paper. Let it dry two days, sandpaper, and then paint the face and features.

Another way to make a papier mache head is to model the head on a base which may be an electric light bulb or a darning egg. Fold a square of waxed paper or saran wrap over the bulb or darning egg. Cover the paper with three or four layers of paste-covered strips of paper toweling or newspaper. Proceed to build up the features as directed in the preceding paragraph. Before it is thoroughly dry, slit the back of the head to remove bulb. When thoroughly dry, close up the back with strips of paste-covered paper.

Still another method for making a papier maché head is to use an inflated balloon as base. Cut a strip of gummed paper tape 12″ long and 1½″ wide. Roll it around the index finger loosely. Moisten it and seal. Then take it off your finger. Cut one end of the tube about ¼″ down to form a crown. Place a balloon into the tube. Inflate the balloon until the desired size is reached, then knot the balloon and insert a proper sized cork into the lower end of the tube as a wedge. Wedge it firmly. Take a paper towel and fold as shown in Fig. 1. Cut off the triangle shadowed in. Cut along the folds to within one inch of the apex. Make sure the radius of this paper circle is the same distance as from the crown to the cork. Open the paper. It will look like a circle with petals (Fig. 2). Place it on a plate and apply paste. Put a large square of saran wrap over the balloon. Then place the balloon with the cork *up* on the center of the paper circle. Paste two opposite petals down firmly until all are pasted (Fig. 3).



Cut tube, fix balloon, inflate and wedge

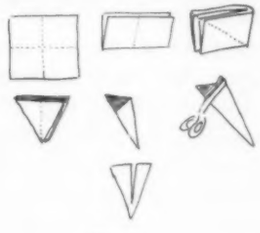


Fig. 1

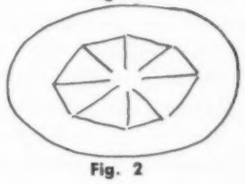


Fig. 2

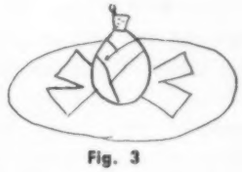


Fig. 3

Roll the balloon between the palms of the hand to smooth down each layer of paper. Cut three more circles of petals, applying each on top of the other. Re-enforce the crown by adding a 2-inch circle of paper toweling. Build up the nose, ears, lips and chin with small wads of paste-covered paper. Anchor them into place with overlaying strips of paste-moistened paper. Let it dry for 24 hours, then pull out cork, deflate and pull out the balloon. Paint the head with tempera colors. Fill in the features, and add hair of wool, cord, fur, or other material. Hair may also be painted on. Make the costume and stitch it to the neck.

4. Paper bag puppet (talking puppet): Take a small bag with a bottom that folds up. Use this end for the head. Paint or draw the head from the top to the lower lip on the upper section of the bag (Fig. 4).

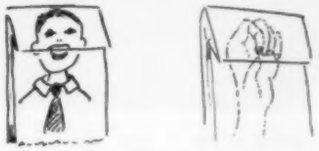


Fig. 4

Finish the face on the lower part. Insert hand in the bag and move the bent fingers as the puppet talks.

5. Simple puppets: These can be made easily from corks, tinker toys, beads, or nuts. Use a knitting needle to punch holes through the corks. Ten corks and two large ones make the puppet. Use one thread (doubled) or elastic to join the hat, face, and torso. Use another for the arms, and still another for the legs. Start each thread with a knot or tie a tiny bead in the knot. This same principle can be used for beads and nuts. Any small nuts such as peanuts or chestnuts can be used. Use knitting needles to punch holes.

6. Pipe cleaner puppet: Take a long pipe cleaner and bend it in half. Twist it around a pencil to form the head. Take one half of a pipe cleaner for arms. Insert under the head and continue to twist to hold arms in place. Finish ends of arms by twisting ends back. Make feet by twisting ends of the long pipe cleaner around a pencil and elongating it. The body may be filled out by winding the remaining half of pipe cleaner around the center portion. A large bead can be used for the head, and small beads for the hands and feet.

Descending for a hard day's work are Horace Wollerman, Illinois (top); David Bernard, Wisconsin; Neville Pearson, Minnesota; Walter Bell, Georgia; Clyde Miller, Ohio; E. Dudley Parsons, Minnesota.

WHAT DO WE BELIEVE . . .

Okoboji leaders ponder credo

LEE W. Cochran who prepared this report was largely responsible for originating the first Okoboji Leadership Conference three years ago. Executive assistant to the dean of the extension division at the State University of Iowa, he can rightly be called "father of the Okoboji idea."

A CREDO for audio-visual education was a major point for consideration when 40 AV specialists from 20 states gathered at the Iowa Lakeside Laboratory on Lake Okoboji in mid-August for the Third Okoboji Audio-Visual Leadership Conference. The two partially completed reports submitted after deliberations represented a good beginning and gave some indication of the complexity of the task.

(See facing page for full text of one working paper.)

Consideration of a credo grew out of the first of four problems proposed by the Conference Planning Committee at the opening meeting Saturday evening and presented for discussion thus:

WHAT DO I BELIEVE to be the role of education in society?

WHAT DO I BELIEVE to be the function of the learning experience in education?

WHAT DO I BELIEVE to be the place of audio-visual in the learning experience?

Here, stated in its entirety, is the agenda prepared by the Planning Committee from problems previously submitted by delegates.

PROBLEM I: We, as audio-visual educators, have not effectively stated what we believe to be our basic philosophy. There is also a definite need for re-examination and restatement of our objectives and policies. What *do* we believe: (a) What is the basic philosophy underlying audio-visual education? (b) What is the psychology underlying audio-visual education? (c) What are the policies contributing to audio-visual education? (d) What are the objectives of effective audio-visual instruction?

PROBLEM II: We, as audio-visual specialists, have not adequately defined the procedures and devices at our disposal to help accelerate instructional improvement through (a) pre-service and in-service teacher training; (b) creation of locally needed instructional materials; (c) development of instructional materials centers (general and specialized); (d) physical (plant) and curricular planning and implementation; and (e) continuous professional program appraisal, including essential research and study.

PROBLEM III: There is need for practical ways of impressing school and university leaders, including superintendents, supervisors, principals and other administrators, with the administrative and supervisory services which can be rendered by trained and capable audio-visual educators.

PROBLEM IV: There is a definite need for improved relationships between our national audio-visual groups and other professional educational organizations; a need paralleled on state and local levels. There is also a need for continued improvement of relationships with lay organizations and the general public.

Copies of the Summary Report of the Third Okoboji Conference will be distributed to 1955 and 56 participants, to those attending this year, and to the DAVI Board of Directors. DAVI members may have copies on request.

Resolutions adopted by the Conference urged that all audio-visual specialists take the initiative in contributing to wise development of television as an instrument of instructional communication, and suggested that national, regional, state and local audio-visual organizations be encouraged to take positive action in this area.

Other resolutions recommended that state groups be encouraged to schedule additional conferences of the Lake Okoboji type such as those held this year in Albany, New York and Austin, Texas; these, to precede the Lake Okoboji Leadership Conference. Still another resolution indicated that preservice education of teachers in audio-visual methods should receive high priority on the agenda at Lake Okoboji next year.

Before departing, delegates passed a resolution recommending that a Fourth Lake Okoboji Audio-Visual Leadership Conference be held in the summer of 1958.

The conference did not solve all the problems posed, but there is little question but that the discussions will give many state and regional groups "food for thought" during the fall and winter months. Specific action will probably never come from the Okoboji Conference, as it is not intended to be an "action group." Action should come from the local, state, regional, and national committees of DAVI. The primary purpose of Okoboji is to give leaders from all parts of the United States adequate time to cogitate and discuss the audio-visual problems on and beyond the horizon, and to reflect on the possible contribution of the AV specialist to the educational program of the future.

—LEE W. COCHRAN

Credo Looms Large in Convention Plans

Jim McPherson will open session
modeled on White House Conference

THE DELEGATES at Okoboji learned that stating an audio-visual credo is no simple undertaking, as Lee W. Cochran reports on the preceding page. They recognized that a few people working but a short time were unequal to the task; that study by all DAVI members would be required.

To facilitate this study, a "White House Conference" type of meeting has been planned for the 1958 DAVI National Convention in Minneapolis. Jim McPherson will point up the strategic points at which the major schools of thought are at variance and the different directions in which each school will take us, individually and as a field, if the philosophies are applied in practice. This kick-off presentation will be followed by small discussion group meetings, the reports of which will be coordinated and presented to the membership in a general session.

The statement developed at the Convention will be significant only if it represents the thinking of the entire membership. To this end, the Convention Program Committee urges careful consideration by each member and discussion in all state and local AV association meetings prior to the Convention. The following working paper from the Okoboji Conference is submitted as "food for thought" for such discussions.

• • •

WE BELIEVE that the role of education in a democratic society is to provide for the continuing development of the individual in our rapidly changing and expanding world. The goals of education in our culture have frequently been the subject of scholarly studies in recent years. From these studies it is apparent that the goals of education include the following: (a) to assist the individual to be a healthy and happy person; (b) to develop action interest in the health and happiness of all other persons; (c) to develop confidence in the individual's ability to recognize and analyze the big and little problems which confront him in daily living; (d) to develop confidence in the ability to apply his past experiences and developed skills in solving or resolving these problems in a socially acceptable manner.

In short, WE BELIEVE that every individual should have full opportunity for his optimum development as a useful citizen—physically, mentally, socially, and emotionally—with strong emphasis on the development of high moral character.

WE BELIEVE — because the way content is taught is important—that an atmosphere should be developed in which individuals can grow in security and acceptance so that they can cope with insecurities and non-acceptance; that rich living experiences should be provided so that individuals develop skills in problem solving today that will enable them to solve the unknown problems of an unpredictable but challenging future.

WE BELIEVE the function of the learning experience is to serve as a means of attaining the goals of education, and should provide a continuum of learning experiences in terms of the needs of the individual and society; that the nature of the learning experience in education is the physical, mental, social and/or emotional involvement of the learner in the experience; and that there can be no involvement without previous communication and no proof of involvement without a behavior reaction. WE BELIEVE this communication may come from external origin or subjective stimulus; and that the process of communication includes certain learner factors which are not within the control of the teacher and these factors must be given adequate consideration by the teacher in the selection, preparation, and presentation of instructional materials.

These factors are: (a) what has taken place in the learner's past; (b) the condition of the learner's present environment; (c) the potential future application by the learner.

WE BELIEVE that the emphasis on audio-visual techniques as an integral part of all education must derive its set of values and take its direction from the goals of education in our democratic society; that the place of audio-visual instructional resources—including materials, equipment and personnel—is to contribute to the continuing improvement of the teaching-learning process by expanding or even by making possible the learning experience; that a variety of materials should be made available from which a range of experiences may be selected; that these should approach as nearly as is practicable those learning experiences which are desirable; and that many learning experiences are made possible and meaningful only with the use of audio-visual techniques. Each audio-visual material or experience makes its characteristic contribution to the learning experience.

Our primary concern is with the learner and the communication that will enable him to achieve the goals of education in our democratic society. Every instructional material, every learning experience must contribute to the values which our society has deemed to be important.

WE BELIEVE that the selection of instructional materials for providing learning experiences is a responsibility of the teacher with such service and assistance from the audio-visual specialist as the teacher may require; that the functional relationship of the audio-visual specialist to the teaching personnel is to exercise every effort toward aiding the teacher to become more useful and effective in developing desirable learning experiences; and, that the audio-visual specialist will stimulate development of the creative capacities of teachers and of the various levels of students in all instructional areas. He will extend the available audio-visual facilities for this purpose.

CONTINUING IMPROVEMENT of educational achievement will inevitably result from a positive community climate based on understanding the goals of education and the educational procedure necessary to reach these goals.

The initiative for developing this climate rests with the educational leaders of the community in the expectation that community leaders will respond favorably to those approaches which will result in improvement of education.

The audio-visual specialist with his knowledge of educational processes and communication techniques is in a strong position to exercise leadership and give direction to the action program that is needed.

Ann Hyer Named to Top Posts

ANNA L. HYER, acting executive secretary since Floyde E. Brooker's resignation last July, has been officially appointed executive secretary of DAVI and director of NEA's Division of Audio-Visual Instructional Services. Announcement was made October 23 by William G. Carr, executive secretary of the NEA.

Dr. Hyer takes over the two top posts in the national office with comparative ease, having learned the ropes as director of studies for DAVI and assistant director of the Division. DAVI members are familiar with her work in the organization's national committees, her achievements in the publications program (excluding the official journal), and her active interest in ETV, the latter culminating in laying the groundwork for the DAVI-sponsored workshop and seminar last autumn.

Ann Hyer

Dr. Hyer has been managing editor of *Audio-Visual Communication Review* and with her new appointment becomes editor of AUDIO-VISUAL INSTRUCTION.

She began her educational career as a science teacher in the Muncie (Indiana) schools and has retained a strong interest in science since that time. Similarly, her work in Iran and Turkey with the Syracuse University project gave her a lasting insight into the international role of audio-visual education.

Dr. Hyer was on the staff at Indiana University during the war years, serving as personnel director and in the audio-visual center. She has taught audio-visual education in the Universities of Virginia and Kentucky and at American University in Washington, D. C. She holds an M.A. in guidance and personnel from Northwestern University, and the Ed.D in audio-visual and general education from Indiana University.

Dr. Hyer lives in Lorton, Virginia, owns a summer cottage on the Shenandoah, is the proud possessor of two Mexican Chihuahuas, and is fond of Canadian fishing trips.

The new executive secretary, who is the first woman in NEA to head both a department and division, commented thus when asked about her aspirations for DAVI in the immediate future: "I would like to see emphases on the development of stronger national-state-local AV programs, and closer interrelationships between AV and the total field of education."

As editor of this magazine she hopes to continue its present character but increase the number of pages to give a fuller account of state news and follow more closely the activities and publications of related groups.

Festival Council Formed

DAVI sponsored a third conference of significance in late October when representatives from educational, industrial, and governmental organizations met to form an International Film Festival Advisory Council. (See November issue for ETV meetings sponsored by DAVI in August and September.)

The Council proposed at the October meeting would set up machinery for the selection and screening of non-theatrical, non-governmental motion pictures to be shown at film festivals all over the world.

NEA news sources referred to the meeting as a conference which "may have a vital effect upon the prestige of the United States abroad." DAVI President Robert deKieffer described it as "a first step toward an educational and industrial approach to the problem of providing well-selected 16mm films to demonstrate graphically the American way of life."

This organization will be the first of its kind anywhere. Most governments enter films on an official basis, but under the free enterprise system in this country, business and industry must assume the responsibility for participation. Because so many different organizations send films to festivals, difficulties ensue. Sometimes officials are swamped with entries, often of the wrong kind. For instance, 35mm films will be sent, when the festival calls for 16mm. These are some of the problems the IFFAC will attempt to solve. The Council will work closely with the U. S. Department of State, but will be an entirely independent organization.

Dr. deKieffer was named chairman of the Organization Committee for the Council, and John Flory of Eastman Kodak, Finance Committee chairman.

Stanley McIntosh of the Motion Picture Association, served as coordinating chairman of the conference.

From the States

Clyde Miller of the Ohio department of education was speaker for the fall meeting of the Illinois Audio-Visual Association in Rockford November 1 and 2.

• • •

Edwin O. Dix of the Jam Handy Organization chose the topic, "The Use of Audio-Visual Materials in Educational Situations," for his address to the Department of Audio-Visual Education of the North Dakota Education Association in Minot October 16-18.

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Interests represented at sectional meetings during the 1957 Texaved Conference in Austin November 3-5 were: Teacher Education; System-Wide Supervisors; County and Cooperative Supervisors; and, Building Coordinators, Principals, Teachers, and Librarians. TEXAVED President Harold Wigren presided over the first general session when administrators considered the convention theme, "Making Teaching More Effective Through Wider Use of Audio-Visual Materials," with Lawrence D. Haskew of the University of Texas as panel chairman. Other general sessions were devoted to a discussion of the role of AV materials in the teaching-learning process; and to reports on DAVI, AVCOPI, and the TEXVAED and Lake Okoboji Leadership Conferences.

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Audio-Visual aids from kindergarten to college and beyond were covered in discussions conducted by the New York State Audio-Visual Council at their summer meeting in Albany. Members of the New York State Education Department presented panel discussions the first day, and on the second, led the group sessions. Stressed throughout the two-day meeting were the role of the AV specialist; in-service training for non-specialists; budgetary strategy; and the place of AV in the curriculum.

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Fred Lehman, Wantagh, New York, whose article on lantern slides appears on page 264 of this issue, is president of the Long Island Audio-Visual Council, recently affiliated with DAVI. Other officers are: Sam Cohen, Hewlett, vice president; Lois Walsh, Bethpage, recording secretary; Ivanelle Brown, Rockville Center, corresponding secretary; and George Franciscovich, Seaford, treasurer. John McCagg, East Meadow, is past president. AVISO, the Council's newsletter is published five times yearly and edited by Murray Phillips of Garden City.

Films, Filmstrips, and Recordings

THE STORY of desegregation in the public schools of St. Louis is presented in *A City Decides*, available from Contemporary Films, 13 E. 37th St., New York City. This true account of integration in "a border city in a border state," builds around a teacher who faces a "racial incident" in his Beaumont High School class shortly after integration has taken place. How the board of education proceeded on a policy of integration helped by many local organizations and citizens and by precedents of private and parochial schools is thus highlighted. Available for all uses, including TV. 27½ min, 16mm, b-w, purchase $75, rental $7.50; also available in 35 mm.

Clinton and the Law, one of Edward R. Murrow's See It Now series, reports desegregation in Clinton, Tennessee. The events that brought mob violence, community shame, and finally strong sentiment for the law, all add up to a vivid documentary of current history. Close-ups include John Kasper and other principals. 54 min, 16mm, $195. McGraw-Hill Textfilms, 330 W. 42nd St., New York 36.

Canadian Additions

Two more short discussion-primers are available in the What Do You Think and What's Your Opinion series produced by the National Film Board of Canada. *Choosing A Leader* (What Do You Think series for high school and college, 8 min, b-w) shows the situation, then invites audience reaction. *Making a Decision in the Family* (What's Your Opinion series for high school, college and adult, 8 min, b-w), also a situation presentation, is designed to stimulate discussion on family decision making. McGraw-Hill Textfilms.

Two fine additions to the Ages and Stages series also produced by the National Film Board of Canada are: *From Ten to Twelve*, 26 min, b-w, color, $140 and $265; and *The Teens*, 26 min, b-w, color, $140 and $265. McGraw-Hill Textfilms.

• • •

Enrichment Materials

Enrichment Teaching Materials, 246 5th Ave., New York City, have added to their offerings a new series of recordings of great national documents. Background material, authentic songs, narration of important events that preceded and were significantly influenced by the document or address are all combined with skillful reading of the following: *The Declaration of Independence* and *Patrick Henry's Famous Speech* (Code Nos. EAD1a and EAD1b, back-to-back on one record); *Lincoln's Gettysburg Address* and *The Bill of Rights* (EAD2a and EAD2b, back-to-back). 33⅓ rpm, non-breakable 10-inch records. School price, $3.96 per record (two documents).

Also new are four Enrichment Recordings, 33⅓ rpm, and a set of six Enrichment Filmstrips added to the growing list of records and filmstrips based on Landmark Books. One record (ERL 113) presents two dramatizations, *D-Day, Invasion of Europe*, and *John Paul Jones*. These are adapted from Bruce Bliven Jr.'s *Story of D-Day, June 6, 1944* and Armstrong Sperry's *John Paul Jones*. Another record (ERL 114) presents *The Erie Canal* and *First Overland Mail*, adapted from similarly titled Landmark Books by Samuel Hopkins Adams and Robert Pinkerton, respectively. School price, $3.96 per record (two dramatizations).

The new set of Enrichment Filmstrips, each approximately 45 color frames with captions offers the following titles at $35 for the set, $6.50 per strip: *Pere Marquette* (EFL 13); *Sam Houston* (EFL 14); *Lincoln and Douglas: Years of Decision* (EFL 15); *The Pony Express* (EFL 16); *The Wright Brothers*, (EFL 17); and *The Panama Canal* (EFL 18). Each filmstrip is correlated to a Landmark Book of similar title, yet each can stand by itself. Also available for these titles are correlated (not synchronized) Enrichment Records.

NEW FILM
BULLETIN BOARDS.. an effective teaching device
This film gives suggestions for the planning and organization of creatively designed bulletin boards. Twelve different bulletin boards are used to provide a variety of examples. The collection of different materials illustrated could be used to create interesting backgrounds for any type of display. The film also takes you into a classroom where children and teacher are discussing and planning a bulletin board. Then it shows the children arranging one. Anyone interested in bulletin boards who needs inspiration and motivation will want to use Bulletin Boards: an Effective Teaching Device. It can be used with students at any level from elementary through high school and college, and for pre-service and in-service teacher training.
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OTHER FILMS • Children are Creative, 10 min. color-sound, sale $100.00, rent $5.00
Art Begins at Home, Boy Creates Toy, Crayon Resist, Holiday Art, Monotype Prints, Torn Paper, each film 5 min. color-sound, sale $60.00, rent $3.00.
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LOOKING AT *New Literature*

SAN JOSE MANUAL EVOKES LOUD HURRAH

WHEN A NEW MANUAL on audio-visual instructional materials arrived this fall for review in the columns of Looking at New Literature, the editor was totally unprepared for the enthusiasm which even a cursory glance through the publication aroused. *AV Instructional Materials Manual,* edited by James W. Brown and Richard B. Lewis, provides the audio-visual worker with a kind of assistance rarely found. (Available from Spartan Book Store, San Jose State College, San Jose, California. 1957. 191 p. $2.95.)

The editors themselves suggest that the workbook may be used basically in two ways. It may "be used in several courses, simultaneously, or in sequence. It may be used in courses in general methods and in special subject methods, or in concentrated, single courses in audio-visual methods and materials."

This reviewer feels that it will serve equally as importantly to uncover facts about instructional materials and methods which will help you who are practicing AV to find out what you do not know. After this discovery is made, the contents of the manual will help you fill in the gaps which much previous reading and course-taking may have failed to do. This is the greatest strength of the manual. It doesn't just tell you that dioramas are valuable teaching aids or that the spirit duplicator will supply you with helpful printed matter. It explains how to construct a diorama and how to run a spirit duplicator. Although the exercises are brief and pointed, each instructional aid described is re-enforced with exact references to additional readings. In the reviewer's opinion, this publication can readily become the most used reference work in the AV director's library.

The editors of *AV Instructional Materials Manual* are two of the publication's 10 authors. All are well-known in the audio-visual field and are currently on the staff of San Jose State College. They are, in addition to Brown and Lewis, Thomas D. Clemens, George W. Cochern, Harold H. Hailer, Fred F. Harcleroad, John M. Hofstrand, Leslie H. Janke, Richard S. Mitchell and John L. Moody.

The four main divisions in the publication are: (1) Introductory, (2) Creating Instructional Materials, (3) Selecting and Appraising Materials, (4) Equipment Operation.

A final section contains a miscellany of data of considerable assistance, including a source directory, a glossary of terms, basic reference, a self-appraisal checktest and a laboratory checksheet.

Since many "audio-visual instructional materials and techniques demand skills in construction, manipulation or operation of materials and machines," the introductory portion of the manual is significant in that it makes pertinent observations and suggestions on "How to Learn a Skill" and states a philosophy about creating materials which will help the uncertain person develop a degree of self-confidence. The introduction in this manual should not be skipped. It is a necessary first step.

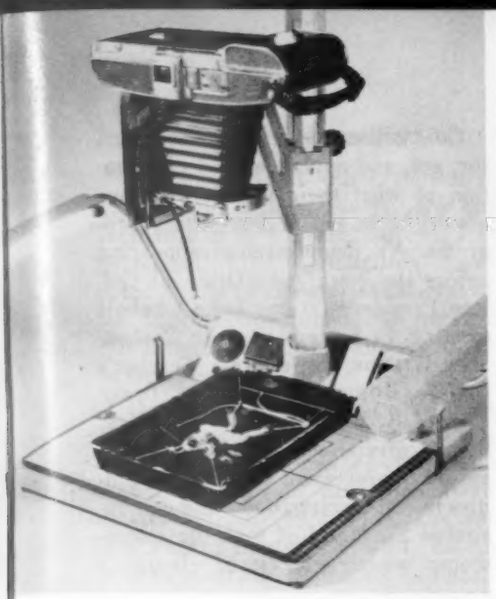
Something of the scope of *AV Instructional Materials Manual* can be gained merely by making an inventory of the contents, keeping in mind, though, that each chapter actually tells you something about the tool, how it can be made and/or used and where to locate additional data on the topic.

Section II, "Creating Instructional Materials," is the mainstay of the volume. It ranges from drawing letters to building a terrarium, and describes the following techniques: designing layouts, simple sketching, chalkboard techniques, graphs, bulletin boards, flannelboards, flat pictures, spirit duplicator, the mimeograph, lantern slide construction, transparencies, mounting objects, dioramas, puppets, recordings, preparing scripts, international correspondence, building aquariums, using cameras, using audio-visual materials in testing and analyzing materials centers and classroom facilities.

Section III, "Selecting and Appraising Materials," includes criteria for instructional aids, taking into consideration not only films, filmstrips, recordings, field trips, television programs, and maps and globes, but also textbooks and encyclopedias. This section guides the audio-visual specialist in the important problem of learning "to locate materials that are exactly right for students' needs in the subjects they are studying" and shows how to record this data—in other words—how to make a bibliography. This will be required reading for many a trained audio-visual worker who has had to learn how to compile a bibliography on his own—after completing audio-visual graduate courses. The manual goes beyond listing the usual sources. It goes as far as to give techniques for "Locating Information in Periodicals."

The guidance provided in the third section for learning how to operate equipment is both more complete and at the same time more comprehensible than much of the literature already available in this area.

If you want aid in local production —quickly and efficiently—don't fail to have a copy of *AV Instructional Materials Manual* at hand. When you are not creating materials, you will find other data that will serve your purposes admirably.



The Polaroid Process

(Continued from page 263)

liant image on the screen even in the classroom where lighting conditions are poor.

The Polaroid camera which takes the 46 film also uses the 46L film. This gives a picture 3¼ x 4, and the slides can be projected in the old stereoptican or in a projector similar to the Keystone overhead. Many prefer the 3¼ x 4 slide to the 2¼ x 2¼. In each case, the plastic mounts are available.

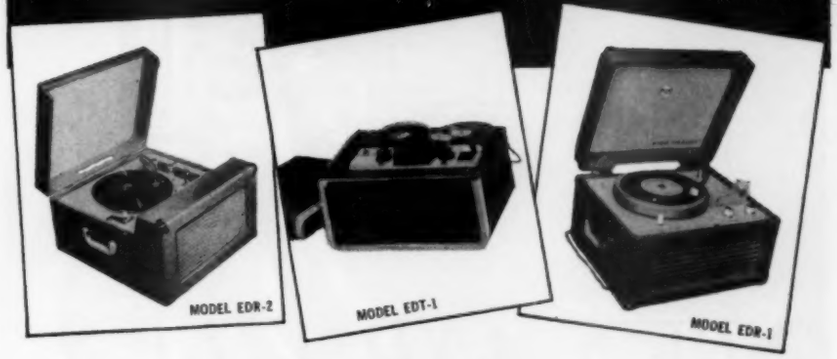
If Polaroid would make a slide carrier for their 2¼ x 2¼ projector which would accommodate 2 x 2 slides, schools could use it for other than Polaroid slides. This I think might decrease the hesitancy toward buying it.

New uses are constantly found for the Polaroid camera. One superintendent takes pictures of the condition in which teachers leave their rooms at night, and shows them the next day. I would not recommend this as a way of becoming popular but I must admit that it has been effective. The photograph on this page pictures a frog being dissected. Slides taken at various stages will show everyone in the class exactly what was done and how it was done.

A frequently stressed virtue of local production is that it provides materials to meet individual needs. Many of these materials can be produced photographically. If color is needed, then a method other than Polaroid will have to be considered. Many times, however, a good, clear black and white transparency is desirable and the Polaroid camera and equipment is the easiest, the least expensive, and the best method of achieving the desired results. With all of the cameras now available, it would seem strange if we, as audio-visualists, should overlook this method of producing materials for our teachers.

As you know, my only interest in reporting on products is to call your attention to those which I feel have real application for school use. I do not report on products that I have not had an opportunity to use. In the case of the Polariod camera and accessories I can say without hesitancy that this audio-visual tool has a place in every school system in the country and can be used to help teachers do a better job. I have tried it personally and I know it works. I have taught others to use it and I know that the procedures are simple enough so that anyone can very easily master the skills needed to turn out satisfactory slides.

The New RCA "Scholastic" Line



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AUDIO-AIDS

Two new record players and a tape recorder . . . designed specifically for *hard* use in schools! Scuff 'em . . . they can take it! Bump 'em . . . metal corners and reinforced grilles hold up! Cart 'em around . . . guarded tone arms stay protected! LISTEN TO THEM . . . three-speaker "Tri-Coustic" sound systems produce thrilling high-fidelity performance. Don't decide on *any* record player or tape recorder until you find out all about the RCA "Scholastic" line. Write today for literature that shows these fine instruments in full color and gives you all the details on their rugged construction, excellent sound, and simple operation.

Get in touch with your RCA Audio-Visual Dealer—in your Classified Directory under "Motion Picture Equipment & Supplies"—or write the address below.

FREE! with new Record Players

Sampler Record of selections from RCA Educational Record Collection . . . *plus* Bonus Certificate for purchase of RCA Educational Records ⅓ off nationally advertised prices.

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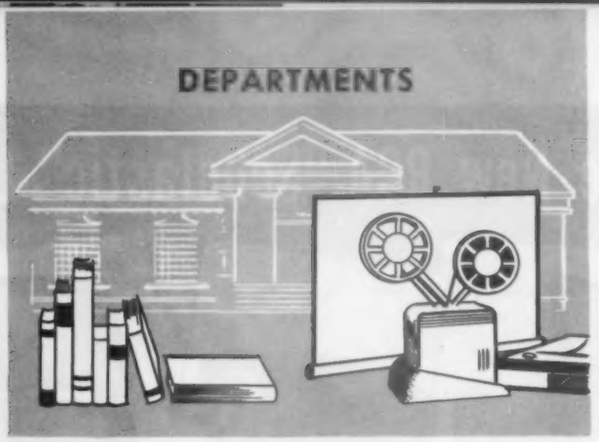

NEWS AND VIEWS

AVCOPI CHAIRMAN

HAROLD E. HILL, associate director of the National Association of Education Broadcasters, was named chairman of the Audio-Visual Commission on Public Information at the Commission's quarterly meeting in Williamsburg, Virginia, October 2. He succeeds Charles Schuller, director of the AV center at Michigan State University.

The new chairman is author of the Commission's fourth publication, *AV on the Air*, a manual to be published soon on the use of radio and TV as public relations tools.

The Commission re-elected Emily Jones, executive secretary of EFLA, as secretary-treasurer. Don White of NAVA and Anna L. Hyer of DAVI were chosen to serve with the officers on the executive committee.

The Commission also:

- Approved a proposed "saturation experiment" to bring all possible AV materials, equipment, and skills to bear on the problem of making instruction more effective in the nation's schools.
- Adopted a resolution calling for study and early action on the above proposal and suggesting a liaison group to coordinate the work.
- Authorized a booklet on AV budgeting to be prepared by K. C. Rugg, associate director of the AV center at Indiana University.
- Welcomed a new member, Dorothea Godfree of the Port Washington public schools, Long Island, who attended as representative of the National School Librarians Association.

OF PEOPLE AND PLACES

JAMES L. PAGE, assistant principal of the University of Wisconsin High School, is now with Michigan State University's Continuing Education Service. As assistant professor of teacher education, he will be instructor-consultant in AV education.

New staff members in the audio-visual center at Michigan State University are LORAN C. TWYFORD, associate professor of the audio-visual center and highway traffic safety center, also consultant to the safety center; KENNETH R. KUEMMERLEIN, instructor, and assistant to the head of the graphics section; and EDWARD P. MCCOY, head of film production.

DONALD W. SMITH, formerly supervisor of audio-visual aids at the University of Illinois, has entered a doctoral program under J. J. McPHERSON at Wayne University.

ELLIOT W. COOLEY left his post at Syracuse University this fall to set up and staff a national audio-visual center in Addis Ababa which will service all ministries of the Ethiopian government. He will join Emdree Johnson who has been in Ethiopia for the past three years building up a center for the Ministry of Education. Mr. Cooley was production manager of the AV center at Syracuse and taught two graduate courses in non-theatrical motion pictures. He expects to be in Ethiopia for four years.

COLLEGE PRESIDENTS in Iowa asked for, got, and applauded a demonstration of what their future AV plans should be in expanding college programs. AV demonstrators appearing before the Iowa Association of College Presidents at the Lake Okoboji meeting in September were WALDEMAR GJERDE, Iowa State Teacher's College, ROBERT N. JOHNSON, Drake University, and LEE W. COCHRAN, State University of Iowa. They discussed improvement of physical facilities in college classrooms and demonstrated a method of teaching microscopic science via closed circuit.

NAVA's MEMBERSHIP LIST is out. The NAVA Membership List and Trade Directory contains information on services offered by approximately 400 audio-visual dealers listed by geographical location.

THE ABACUS, a counting device used for centuries in the Orient, will be introduced this year into the St. Louis public schools where it will be used as a teaching aid in all first and second grade classrooms.

Free Exhibits

Four free exhibits illustrating phases of ETV are available from the Educational Television and Radio Center at Ann Arbor, Michigan. They describe pictorially the uses of ETV programs in teacher education, adult education, and classroom instruction. Shipped prepaid by the Center, they are lightweight, easy to handle, and fold flat for shipping or carrying. Ideal for state meetings. Write the Center for details.

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The scale model exhibit of a secondary classroom, a project sponsored by the DAVI Building and Equipment Committee, is again available for DAVI meetings on loan basis. For bookings, contact A. J. Foy Cross, professor of education, New York University.

Seattle Film Festival

Seattle Film Associates announce that the 1958 Film Festival will take place next spring in Seattle. Film producers and distributors may contact Mrs. Jennie King, Program Chairman of 1958 Film Festival, Pacific Telephone and Telegraph Company, 820 Fairview North, Seattle, Washington.

Brussels Competition

Educational and other non-commercial film-makers everywhere are invited to enter the International Experimental Film Competition sponsored by the Commissariat General of the Belgian Government as part of the Brussels World's Fair, April 17 to October 17, 1958.

The term "experimental film" covers *avant garde* works whose subject-matter is unfamiliar in the cinema, or which explore new developments in cinematographic expression. The announcement invites entries of "essays in film poetry and abstract compositions—all original creations which fall outside the familiar pattern of commercial film entertainment."

Films may be 16 or 35mm, silent or sound, black and white or color, and of any length. The two *Grands Prix* will be a gold medal and 500,000 Belgian francs, and a silver medal and 250,000 Belgian francs. Films must arrive in Belgium not later than March 1, 1958. For further details write La Cinémathèque de Belgique, Jacques Ledoux, Curator, Palais des Beaux-Arts, Ravenstein, Brussels.

New SVE Catalogs

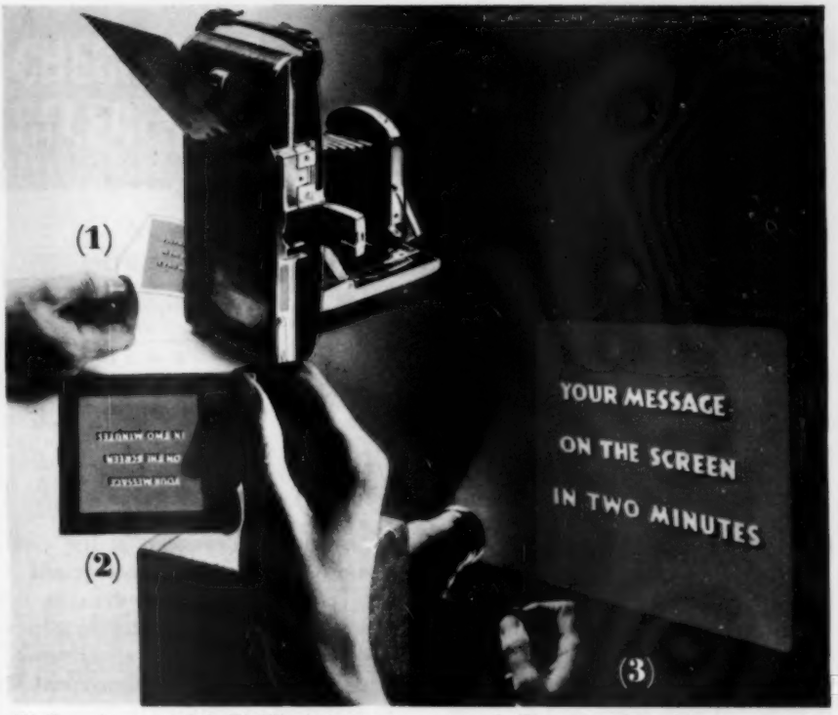
The graded catalog titled *Educational Filmstrips* groups together recommended filmstrips according to subject matter with illustrations and concise descriptions for each filmstrip.

The *Catholic School Catalog* of filmstrips contains a complete *Educational Catalog* with a special alphabetized section of Catholic religious filmstrips bound into the front of the book.

Both include new materials scheduled for release up to and including January 1, 1958, and complete information on SVE Package Plans for obtaining free School Master filmstrip projectors and/or School Master record players with filmstrip orders. Society for Visual Education, 1345 Diversey Parkway, Chicago 14.

Television Study

The role of television in the classroom is one of several studies contemplated under a $68,000 grant to the National School Boards Association made by the Fund for the Advancement of Education.



(1) Snap it . . . see it! (2) Slip it into a mount, and (3) project it as big as you want.

Polaroid Corporation Announces

QUICK, EASY WAY TO MAKE SLIDES

Now with a standard Polaroid Land Camera, you can make slides in a classroom or lab, and project them immediately.

Polaroid Corporation has perfected a film which produces black-and-white slides right in a *regular* Polaroid Land Camera. Just click the shutter and two minutes later you have a slide ready for projection.

The complete system includes the standard Polaroid Land Camera, the film, mounts, projector, plus a versatile Copymaker that lets you make slides from any textbook, existing photograph, charts, graphs and titles. You can speed teaching by making slides of laboratory setups, students in action, and on field trips. Test material can even be projected in lighted classrooms during exams.

Two sizes are available—2¼ x 2¼, and 3¼ x 4 for use in existing "lantern slide" projectors.

These slides cost about ⅓ as much as conventional slides. But the real saving is in the time and effort that it takes to put any picture on the screen.

Send in this coupon for detailed information, plus a case history of how one teacher uses these new on-the-spot slides.

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Please send me detailed information on the new Polaroid transparency system.

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the horns of the dilemma

Editorial | *Anna L. Hyer*

THE ARTICLES in this issue seem to indicate an underlying philosophy on the part of the planners which might be stated something like this: Teachers and/or pupils should produce audio-visual materials and, if provided with space and facilities, they will do so. Will they and should they? Granting the many values to be derived from local production, let us examine its underlying philosophy and the dilemma it poses for the teacher, pupils, and audio-visual personnel.

Large classes and heavy workloads are majors areas of teacher concern. This was clearly stated by teachers themselves in a study done by the Research Division of the NEA last year. Forty percent of the teachers also stated they lacked know-how in the use of audio-visual materials. It seems illogical to assume that teachers already burdened with excess workloads will be able to find time for preparation of additional teaching materials even though they may be aware of their value. It is even less likely that teachers lacking knowledge and experience in the use of audio-visual materials will become involved.

Teacher time is saved if students do the production. But what about pupil time? Current events are placing more demands on both teachers and pupils. There are calls for a speeding up of instruction, more attention to subject matter especially science and math, increased opportunities for the gifted, and on and on. "Efficiency" which has long been important to industry is only now becoming important in the teaching-learning process. The public is becoming increasingly aware of the value of pupil-hours spent in the classrooms. Educators will be required in the future, much more than in the past, to evaluate every teaching procedure to determine its effectiveness. This will apply to class time spent on preparation of learning materials.

When is local production by pupils a worthwhile experience, and when is it mere busy work? Many valuable by-products may be derived from pupil production activity. For example, students can be encouraged to organize and apply their learning, increasing the probability that ideas will be understood and remembered. The creative process itself is often worthwhile, and mav increase interest and motivation to learn. Too, some students learn faster when manipulation of materials is involved. There are other values.

The degree to which these values will occur in any particular production activity will vary. Situations will arise in which values derived from production will be insufficient to justify the needed expenditure of classroom time. Yet the materials are needed to achieve curricular goals. Then, in terms of mere business efficiency, this production should be done *for* the teacher and/or pupil. This is the job of the audio-visual specialist. He exists to assist teachers in raising classroom efficiency.

There is no easy answer to what production is needed and who should do it. These decisions require a professionally trained teacher making professional diagnoses involving the learners and the desired learnings.

It is the teacher who must analyze the types of learning desired from a classroom experience and the degree of mastery required. The teacher must know the interest and needs of individual pupils and how each learns best. John may learn the shape of states and their geographic positions best by making or working with jigsaw puzzles of the United States. This may not be the most efficient method for Mary or Jim. The fact that a pupil or pupils need a particular material is not of itself sufficient reason for pupil or teacher production of the material.

Only when a teacher approaches learning and the learner in an analytical fashion can he be reasonably sure of functioning as an efficient guide. He is then in a position to decide if and what local production is desirable and for or by whom. He is thus able to avoid classroom "busy work."

From time immemorial good teachers have been creating "local" innovations in their classrooms to improve learning efficiency of the group or of individuals within the group. *This is* local production at its best. Such a teacher should be encouraged to make and use a wide variety of teaching materials through the provision of facilities, space, and professional assistance.

Teaching-learning materials *may* and *should* be produced locally by pupils, teachers, audio-visual personnel, and by combinations of these groups. The decision as to what needs to be prepared or produced locally and who should do the producing are decisions that in the last analysis only the classroom teacher can make. The decisions are not easy. The AV coordinator must be prepared to assist and to do this he needs to think through his own philosophy concerning local production.

SEE HERE NOW!

Have you enrolled in the National Education Association for 1957-58?

The NEA is strongly supporting Audio-Visual education, including the recent employment of a specialist on the use of TV in the classroom.

The NEA Needs You——
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THE *SPECIAL* ISSUE OF

AV COMMUNICATION REVIEW

. . . the report of the Yale-Eastman Seminar, "GRAPHIC COMMUNICATIONS AND THE CRISIS IN EDUCATION" . . . an invaluable reference book for educators and librarians.

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Write:

Department of Audio-Visual Instruction, NEA
1201 16th St., N.W., Washington 6, D. C.

FARM BABIES AND THEIR MOTHERS

1 reel, kindergarten-primary film
award film—Boston Film Festival

REPTILES ARE INTERESTING

1 reel, elementary-jr. high film
award film—Columbus Film Festival

FILM ASSOCIATES OF CALIFORNIA FA
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QUESTION	WHY THIS IS IMPORTANT
1 Does it have color-coded threading?	☐ Makes threading and operating fast and simple, even for beginners.
2 Does it have safety film trips?	☐ Stops film movement instantly in case of film emergency. Guards against costly film damage.
3 Does it have Hi-Lite optical system?	☐ In connection with Mark II shutter, throws 38% more light on the screen. Assures bright pictures even in hard-to-darken rooms.
4 Does it have stationary sound drum?	☐ Assures clear, smooth sound. Has no moving parts to get out of adjustment. Scans full sound track.
5 Does it have visible one-spot oil system?	☐ Transparent filling tube shows oil level. Reservoir automatically feeds oil to all points as needed.
6 Are both reels mounted on top of projector?	☐ No overhanging reels to present a "traffic hazard." Projector can be set up on any level surface, even the floor.
7 Does it have single drive sprocket?	☐ Eases film stress, because same sprocket controls film entering and leaving projector.
8 Does it have compensating film shoes?	☐ Automatically adjust themselves to varying film thicknesses. Guard against splices catching.
9 Does it have 180° swing-out lens?	☐ Facilitates threading and cleaning of both aperture and film channel.
10 Is it adaptable for magnetic recording?	☐ Complete magnetic recording on film and playback can be added at any time by simply connecting Victor Magnesound.

ONLY VICTOR HAS ALL

VICTOR ASSEMBLY 10
Lightweight projector for small audiences. Amplifier operates at 10 watts continuous output, 18 watts peak. Available with 9" speaker, top-mounted and fully baffled—or separately cased 12" speaker shown.

Particularly important is Victor's new red, white and blue color-coded threading. Color lines on projector clearly show where to thread and the sequence of threading. Other time-proven features—sound and silent speeds—still picture—reverse projection—power rewinding with no change of belts or reels.

Victor was first to develop 16 mm projectors and through the years Victor has been first to perfect improvements that assure finest pictures—finest sound—easiest operation. That is why Victor 16 mm sound motion projectors long have been the choice of audio-visual experts in 73 countries.

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Producers of precision photographic equipment
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INDEX—VOLUME II, 1957

Sarah N. Alexander, Indexer

ARTICLES are indexed by author and subject. Book, booklet, and article reviews are indexed within subject. Abbreviations used in this index are: Ja, January; F, February; Mr, March; Ap, April; My, May; J, June; O, October; N, November; D, December; (Ed.), Editorial; (BR), Book or Booklet Review; (AR), Article Review.—SNA

Abendroth, Larcel, biographical sketch, J 162; and Peck, C., Learning to live with numbers, J 176-77.

Affiliated Organizations and States, California, Ja 7; F 39.
California: San Jose State College, Ja 24, 26.
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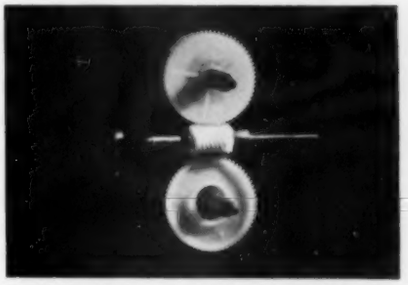

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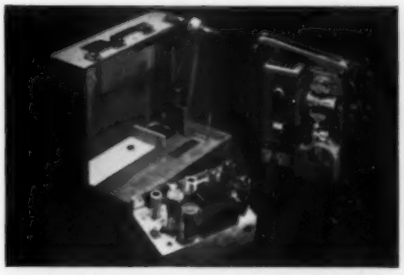

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